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                 of publication
         JAN 28
NEWS
     7
                 TOXCENTER enhanced with reloaded MEDLINE segment
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                 PCI now available as a replacement to DPCI
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NEWS 11 FEB 25
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                 IMSPRODUCT reloaded with enhancements
NEWS 13 FEB 29
                 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                 U.S. National Patent Classification
                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
NEWS 14
         MAR 31
                 IPC display formats
NEWS 15
         MAR 31
                 CAS REGISTRY enhanced with additional experimental
                 spectra
NEWS 16
         MAR 31
                 CA/CAplus and CASREACT patent number format for U.S.
                 applications updated
NEWS 17 MAR 31
                 LPCI now available as a replacement to LDPCI
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 18 MAR 31
NEWS 19 APR 04
                 STN AnaVist, Version 1, to be discontinued
NEWS 20 APR 15
                 WPIDS, WPINDEX, and WPIX enhanced with new
                 predefined hit display formats
NEWS 21
         APR 28
                 EMBASE Controlled Term thesaurus enhanced
NEWS 22
         APR 28
                 IMSRESEARCH reloaded with enhancements
NEWS 23 MAY 30
                 INPAFAMDB now available on STN for patent family
                 searching
NEWS 24
         MAY 30
                 DGENE, PCTGEN, and USGENE enhanced with new homology
                 sequence search option
NEWS 25
         JUN 06
                 EPFULL enhanced with 260,000 English abstracts
NEWS 26
                 KOREAPAT updated with 41,000 documents
         JUN 06
NEWS 27
         JUN 13
                 USPATFULL and USPAT2 updated with 11-character
                 patent numbers for U.S. applications
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                 CAS REGISTRY includes selected substances from
                 web-based collections
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         JUN 25
                 CA/CAplus and USPAT databases updated with IPC
                 reclassification data
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chain nodes :
9 10 19 20
ring nodes :
1 2 3 4 5 6 11 12 13 14 15 16
chain bonds :
3-9 6-14 6-19 9-10 19-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16
exact/norm bonds :
1-2 1-6 2-3 3-4 3-9 4-5 5-6 6-14 6-19 9-10 19-20
normalized bonds :
11-12 11-16 12-13 13-14 14-15 15-16
isolated ring systems :
containing 1 : 11 :

G1:C,O

G2:C, N

Match level :

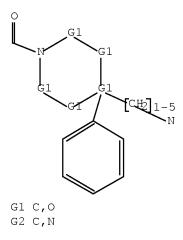
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 9:CLASS 10:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 19:CLASS 20:CLASS

L1 STRUCTURE UPLOADED

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Structure attributes must be viewed using STN Express query preparation.

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COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.46 0.67

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 07:56:09 ON 10 JUL 2008
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=> s L1 SSS full REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 07:56:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1829831 TO ITERATE

54.6% PROCESSED 1000000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.06

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*INCOMPLETE\*\*

PROJECTED ITERATIONS: 1829831 TO 1829831 PROJECTED ANSWERS: 177 TO 265

L2 121 SEA SSS FUL L1

L3 17 L2

AUTHOR(S):

=> d ibib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 17 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:337087 CAPLUS Full-text

DOCUMENT NUMBER: 148:393742

TITLE: Identification of 4-(4-Aminopiperidin-1-yl)-7H-

pyrrolo[2,3-d]pyrimidines as Selective Inhibitors of

121 ANSWERS

Protein Kinase B through Fragment Elaboration Caldwell, John J.; Davies, Thomas G.; Donald,

Alastair; McHardy, Tatiana; Rowlands, Martin G.; Aherne, G. Wynne; Hunter, Lisa K.; Taylor, Kevin; Ruddle, Ruth; Raynaud, Florence I.; Verdonk, Marcel; Workman, Paul; Garrett, Michelle D.; Collins, Ian

CORPORATE SOURCE: Cancer Research UK Centre for Cancer Therapeutics, The

Institute of Cancer Research, Sutton, Surrey, SM2 5NG,

UK

SOURCE: Journal of Medicinal Chemistry (2008), 51(7),

2147-2157

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Fragment-based screening identified 7-azaindole as a protein kinase B inhibitor scaffold. Fragment elaboration using iterative crystallog. of inhibitor-PKA-PKB chimera complexes efficiently guided improvements in the potency and selectivity of the compds., resulting in the identification of nanomolar 6-(piperidin-1-yl)purine, 4-(piperidin-1-yl)-7-azaindole, and 4-(piperidin-1-yl)pyrrolo[2,3-d]pyrimidine inhibitors of PKB $\beta$  with antiproliferative activity and showing pathway inhibition in cells. A divergence in the binding mode was seen between 4-aminomethylpiperidine and 4-aminopiperidine containing mols. Selectivity for PKB vs PKA was observed with 4-aminopiperidine derivs., and the most PKB-selective inhibitor (30-fold) showed significantly different bound conformations between PKA and PKA-PKB chimera.

IT 669068-16-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(piperidinyl pyrrolopyrimidines as protein kinase B inhibitors) RN 669068-16-0 CAPLUS CN 1-Piperidinecarboxylic acid, <math>4-(aminomethyl)-4-(4-chlorophenyl)-,

1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1275232 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 147:522261

TITLE: Preparation of purine and related analogues as ROCK

kinase or protein kinase P70S6K inhibitors

INVENTOR(S): Davies, Thomas Glanmor; Garrett, Michelle Dawn; Boyle,

Robert George; Collins, Ian

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of

Cancer Research Royal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 212pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	ATENI	NO.			KIN	D	DATE		,	APPL	ICAT	ION :	NO.	DATE				
		71253					2007			WO 2	007-	 GB15	18		2	0070		
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		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
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PRIORI'	TY AE	.:						GB 2	006-	8176	A 20060425							
											006-	8179	A 20060425					
OTHER	SOUR	E(S):			MARPAT 147:52226													

OTHER SOURCE(S): MARPAT 147:522261

GΙ

AΒ Title compds. I [T = N or CR5; J1-J2 = N=C(R6), (R7)C=N, (R8)N-C(O), (R8)2C-III = N O CR5; J1-J2 = N=C(R6), (R7)C=N, (R8)N-C(O), (R8)2C-III = N O CR5; J1-J2 = N=C(R6), (R7)C=N, (R8)N-C(O), (R8)2C-III = N O CR5; J1-J2 = N=C(R6), (R7)C=N, (R8)N-C(O), (R8)2C-III = N O CR5; J1-J2 = N=C(R6), (R7)C=N, (R8)N-C(O), (R8)2C-III = N O CR5; J1-J2 = N=C(R6), (R7)C=N, (R8)N-C(O), (R8)2C-III = N O CR5; J1-J2 = N O CR5;C(0), N=N or (R7)C=C(R6); E = 5- to 6-membered monocyclic carbocyclic or heterocyclic group; Q1 = bond or (un)substituted saturated hydrocarbon linker, one of the C atoms being optionally be replaced by O or N, or an adjacent pair of C atoms may be replaced by CONH, NHCO, etc.; Q2 = bond or (un)substituted saturated hydrocarbon linker, wherein one of the C atoms may optionally be replaced by O or N; G = H, NR2R3, OH or SH with the proviso that when E = arylor heteroaryl and Q2 = bond, then G = H; R1 = H, aryl or heteroaryl, with the proviso that when R1 = H and G = NR2R3, then Q2 = bond; R2 and R3independently = H, (un)substituted hydrocarbyl, acyl, etc.; R4, R6 and R8 independently = H, halo, saturated hydrocarbyl, CN, CONH2, CF3, NH2, etc.; R5 and R7 independently = H, halo, saturated hydrocarbyl, CN, or CF3], and their pharmaceutically acceptable salts, solvates, tautomers or N-oxides thereof, are prepared and disclosed as ROCK kinase or protein kinase P70S6K inhibitors. Thus, e.g., II was prepared by condensation reaction of 4-fluoro-1-(triisopropylsilanyl)-1H-pyrrolo[2,3-b]pyridine with [[4-(4chlorophenyl)piperidin-4-yl]methyl]amine followed by deprotection. Many compds. of the invention showed antiproliferative activity in Alamar Blue assay and were found to have IC50 values of < 25  $\mu\text{M}$ . II exhibited inhibitory activity against ROCK-II and P70S6K with IC50 values of  $< 0.01 \, \mu M$  and 0.03  $\mu M$ , resp. I should prove useful for the treatment or prophylaxis of a disease or condition in which the modulation (e.g. inhibition) of ROCK kinase or protein kinase P70S6K.

IT 669068-16-0P, 4-Aminomethyl-4-(4-chlorophenyl)piperidine-1-carboxylic acid tert-butyl ester 885500-47-0P, 4-(4-Chlorophenyl)-4-[(methylamino)methyl]piperidine-1-carboxylic acid tert-butyl ester

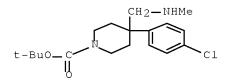
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of purine and related analogs as ROCK kinase or protein kinase P70S6K inhibitor)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

CN 1-Piperidinecarboxylic acid,  $4-(4-\text{chlorophenyl})-4-[(\text{methylamino})\,\text{methyl}]-$ , 1,1-dimethylethyl ester (CA INDEX NAME)



L3 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:439604 CAPLUS Full-text

DOCUMENT NUMBER: 146:421851

TITLE: Preparation of piperidine derivatives as antagonists

of CCR1 receptor

INVENTOR(S): Zhang, Penglie; Pennell, Andrew M. K.; Chen, Wei;

Greenman, Kevin Lloyd; Li, Lianfa; Sullivan, Edward J.

PATENT ASSIGNEE(S): Chemocentryx, Inc., USA SOURCE: PCT Int. Appl., 86pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

Ι	PAT	ENT 1	. O <i>r</i>			KIND DATE					APPL	ICAT		DATE 				
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			GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,
			KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
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Ţ	US 20070088036							2007	0419		US 2006-5		5469.	38		2	0061	011
Ţ	US	2007	0093	467		A1		2007	0426		US 2	006-	5802	02		2	0061	011
PRIOR:	RIORITY APPLN. INFO.:									US 2005-725980P						P 2	0051	011
OTHER	SO	URCE	(S):			MAR	ARPAT 146:4218			51								

GΙ

Title compds. I [R1 = cycloalkyl, (un)substituted alkyl, haloalkyl, etc.; any two R1 attached to the same or different carbon atoms may join together to form a 3- to 7-membered ring; m = 0-4; R2-6 independently = H, halo, CN, NO2, etc.; A = H, aryl, heteroaryl, etc.; B = (un)substituted aryl or heteroaryl; L1 = (un)substituted alkylene or heteroalkylene], and their pharmaceutically acceptable salts, are prepared and disclosed as antagonists of CCR1 receptor. Thus, e.g., II was prepared via heterocyclization of 4-chlorobenzyl cyanide with bis(2-chloroethyl)amine followed by acylation with (4-chloro-5-methyl-3-trifluoromethylpyrazol-1- yl)acetic acid. Select compds. were evaluated for their inhibitory activity in CCR1 ligand binding assay or chemotaxis assay, e.g., II demonstrated IC50 value of < 1000 nM.

IT 934347-52-1P

INVENTOR(S):

RN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine derivs. as antagonists of CCR1 receptor) 934347-52-1 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-(4-chlorophenyl)-1-piperidinyl]-2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (CA INDEX NAME)

L3 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:11886 CAPLUS Full-text

DOCUMENT NUMBER: 146:121827

TITLE: Piperidine derivatives useful as histamine H3

antagonists and their preparation, pharmaceutical compositions and use in the treatment of diseases Aslanian, Robert G.; Berlin, Michael Y.; Boyce,

Christopher W.; Chao, Jianhua; De Lera Ruiz, Manuel; Mangiaracina, Pietro; McCormick, Kevin D.; Mutahi, Mwangi W.; Rosenblum, Stuart B.; Shih, Neng-Yang; Solomon, Daniel M.; Tom, Wing C.; Vaccaro, Henry A.;

Zheng, Junying; Zhu, Xiaohong

PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: PCT Int. Appl., 119pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PA'	TENT :	NO.			KIN	D	DATE		APP	LICAT		DATE					
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EP	1902	046			A1		2008	0326		ΕP	2006-	7735	28		2	0060	619
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PRIORIT	IORITY APPLN. INFO.:								US 2005-692110P						P 20050620		
										WO	2006-	US23	800		W 2	0060	619
OTHER S	ER SOURCE(S):					PAT	146:	1218:	27								

 $(R^5)_a$   $(R^6)_b$ 

AB Disclosed are novel compds. of the formula I or a pharmaceutically acceptable salt thereof; compns. and methods of treating allergy-induced airway responses, congestions, obesity, metabolic syndrome, alc. fatty liver disease, hepatic steatosis, nonalcoholic steatohepatitis, cirrhosis, hepatacellular carcinoma and cognitive deficit disorders, using said compds., alone or in combination with other agents. Compds. of formula I wherein M1 and M3 are

independently CH and N; M2 is CH, CF and N; Y is CO, CS, C1-5 alkyl, C-NOH and derivs., and SO1-2; X is NH and derivs., aminoalkyl, alkylamino, , CO-3 alkyl, etc.; Z is bond, (un)substituted C1-6 alkyl, (un)substituted alkoxy, (un) substituted alkylamino, etc.; R1 is H, (un) substituted alkyl, (un) substituted (hetero) cycloalkyl, (un) substituted (hetero) aryl, etc.; R2 is (un) substituted alkyl, (un) substituted alkenyl, (un) substituted (hetero) aryl, and (un)substituted (hetero)cycloalkyl; R3 is H, alkyl, (un)substituted (hetero)aryl, (un)substituted (hetero)cycloalkyl, and CONH2; R5 and R6 are independently halo, alkyl, OH, alkoxy, haloalkyl, CN, etc.; a and b are independently 0, 1 and 2; n and p are independently 1, 2 and 3; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by etherification ot N-Boc-piperidin-4-ol with 3,5dichlorophenol; the resulting N-Boc-4-(3,5-dichlorophenoxy) underwent hydrolysis to give 4-(3,5-dichlorophenoxy)piperidine, which underwent amidation with N-[2-(tert-butoxycarbonylamino)pyridin-4-ylmethyl]piperidine-4carboxylic acid lithium salt; the resulting amide underwent hydrolysis to give compound II. All the invention compds. were evaluated for their histamine antagonistic activity (data given).

IT 918532-07-7P 918532-53-3P 918533-86-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of piperidine derivs. as histamine H3 antagonists useful in treatment of diseases)

RN 918532-07-7 CAPLUS

CN Acetamide, N-[[1-[[5-[(dimethylamino)methyl]-2-furanyl]methyl]-4-piperidinyl]carbonyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

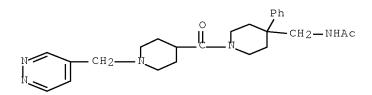
RN 918532-53-3 CAPLUS

CN Acetamide, N-[[4-phenyl-1-[[1-(4-pyridinylmethyl)-4-piperidinyl]carbonyl]-4-piperidinyl]methyl]- (CA INDEX NAME)

918533-86-5 CAPLUS

RN

CN Acetamide, N-[[4-phenyl-1-[[1-(4-pyridazinylmethyl)-4-piperidinyl]carbonyl]-4-piperidinyl]methyl]- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:625275 CAPLUS Full-text

DOCUMENT NUMBER: 145:249070

TITLE: Preparation of 2,3-dihydro-1H-spiro[isoquinoline-4,4'-

piperidine] via an N-sulfonyl Pictet-Spengler reaction

AUTHOR(S): Liu, Jian; Jian, Tianying; Sebhat, Iyassu; Nargund,

Ravi

CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Research

Laboratories, Rahway, NJ, 07065, USA

SOURCE: Tetrahedron Letters (2006), 47(29), 5115-5117

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:249070

AB A high yielding synthesis of variously substituted 2,3-dihydro-1H-spiro[isoquinoline-4,4'-piperidine] is reported. N-(2- nitrophenyl)sulfonyl was successfully used as both an activating and protecting group for the key

Pictet-Spengler reaction.

IT 906369-58-2P 906369-59-3P 906369-60-6P 906369-61-7P 906369-62-8P 906369-63-9P 906369-64-0P 906369-80-0P 906369-81-1P

906369-82-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of dihydro-spiro[isoquinoline-piperidine] by Pictet-Spengler reaction using N-(nitrophenyl)sulfonyl activating and protecting group)

RN 906369-58-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methylphenyl)-4-

[[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

RN 906369-59-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-fluorophenyl)-4[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{Me} - \text{$\stackrel{\circ}{\mathbb{N}}$} - \text{NH} - \text{CH}_2 \\ \text{$t$-BuO-C} \end{array}$$

RN 906369-60-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4[[(methylsulfonyl)amino]methyl]-, phenylmethyl ester (CA INDEX NAME)

RN 906369-61-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methoxyphenyl)-4[[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

RN 906369-62-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3,4-difluorophenyl)-4[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-63-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3,4-dimethylphenyl)-4[[(methylsulfonyl)amino]methyl]-, phenylmethyl ester (CA INDEX NAME)

RN 906369-64-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{Me} & & & \\ \text{C1} & & & \\ & & & \\ \end{array}$$

RN 906369-80-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(2-nitrophenyl)sulfonyl]amino]methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c}
 & \circ \\
 & \circ \\$$

RN 906369-81-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methylphenyl)-4-[[[(2-nitrophenyl)sulfonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-82-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4-[[[(2-nitrophenyl)sulfonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:465188 CAPLUS Full-text

DOCUMENT NUMBER: 144:488667

TITLE: Pharmaceutical compounds such as quinazolinones and

their preparation, and use for treatment of protein

kinase A and/or B mediated diseases

INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon;

Verdonk, Marinus Leendert; Woodhead, Steven John; Wyatt, Paul Graham; Sore, Hannah Fiona; Walker, David

Winter; Caldwell, John; Collins, Ian

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of

Cancer ResearchRoyal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 178 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006051290 WO 2006051290	A2 A3	20060518 20060914	WO 2005-GB4323	20051109

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

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GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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     EP 1814552
                                20070808
                                            EP 2005-801609
                                                                   20051109
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             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     JP 2008519087
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                                            JP 2007-540710
                          Τ
                                                                   20051109
PRIORITY APPLN. INFO.:
                                            GB 2004-24742
                                                                A 20041109
                                            US 2004-626403P
                                                                P 20041109
                                            WO 2005-GB4323
                                                                W 20051109
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MARPAT 144:488667 OTHER SOURCE(S):

$$G = \begin{bmatrix} R^4 \\ R^4 \\ R^4 \end{bmatrix} = \begin{bmatrix} R^3 \\ R^2 \\ R^2 \end{bmatrix} \begin{bmatrix} NH \\ NH \\ NH \end{bmatrix}$$

GΙ

The invention is related to quinazolinones I [B-D=N:CH] and derivs., NHCO and AΒ derivs.; G = OH, NH2 ad derivs.; E = CONH and derivs., O, S, NH, etc., with proviso; A = a bond and R4 and R4a are absent; or A = saturated hydrocarbon linker containing 1-7 C's, wherein 1 of the C atoms may optionally be replaced by an O or N atom; R1-R3 = independently H, halo, (un)substituted hydrocarbyl; R4 = H, alkyl; R4a = H, alkyl, monocyclic or bicyclic carbocyclyl or heterocyclyl containing up to 3 heteroatoms; or R4 and R4a together with the intervening atom(s) of A form a saturated monocyclic heterocyclic group] or salts, solvates, tautomers or N-oxides thereof, that inhibit or modulate the activity of protein kinase A (PKA) and protein kinase B (PKB), and their use in the treatment or prophylaxis of disease states or conditions mediated by PKA and PKB, such as proliferative diseases. The invention is also related to the preparation of quinazolinones I. Thus, acylation of 4-[ (tertbutoxycarbonyl)amino]-2- (3,4-dichlorophenyl)butyric acid with 7-amino-3Hquinazolin-4-one and Boc-deprotection gave quinazolinone II. Selected I inhibited protein kinase A and/or B with IC50 values of less than 50  $\mu M$ . 669068-16-0P, 4-Aminomethyl-4-(4-chlorophenyl)piperidine-1-ΙT carboxylic acid tert-butyl ester 887129-10-4P, 4-(4-Chlorophenyl)-4-[[[3-(2,4-dimethoxybenzyl)-4-oxo-3,4dihydroquinazolin-7-yl]amino]methyl]piperidine-1-carboxylic acid

tert-butyl ester

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of quinazolinones as protein kinase A and/or B inhibitors for treating proliferative diseases)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 887129-10-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[[[3-[(2,4-dimethoxyphenyl)methyl]-3,4-dihydro-4-oxo-7-quinazolinyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$t-Buo-C$$

L3 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:411957 CAPLUS Full-text

DOCUMENT NUMBER: 144:450728

TITLE: Ortho-condensed pyridine and pyrimidine derivatives

(e. g. purines) as protein kinases inhibitors and their preparation, pharmaceutical compositions and use for treatment of protein kinase mediated diseases such

as proliferative diseases

INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon;

Walker, David Winter; Woodhead, Steven John; Wyatt, Paul Graham; Caldwell, John; Collins, Ian; Da Fonseca,

Tatiana Faria

PATENT ASSIGNEE(S): Astex Therapeutics Ltd., UK; The Institute of Cancer

ResearchRoyal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 223 pp., which

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.						DATE			APPL	ICAT	DATE 						
WO	2006	0460	24		A1	_	2006	0504		WO 2	005-	 GB41	 19		2	 0051	025	
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		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KΡ,	KR,	KΖ,	
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	
		NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	
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		YU,	ZA,	ZM,	ZW													
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,	
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		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,	
		GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,	
		KG,	KΖ,	MD,	RU,	ТJ,	TM											
EP	1812	004			A1		20070801			EP 2	005-	)5-797685			2005		025	
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		IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR		
JP	2008	5179	84		Τ		2008	0529		JP 2	007-	5385	00		2	0051	025	
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										US 2	004 -	6218	21P		P 2	0041	025	
										US 2	005-	6841	19P		P 2	0050	524	
										WO 2	005-	GB41	19	,	W 2	0051	025	
OTHER S	HER SOURCE(S):						MARPAT 144:45072					128						

GΙ

The invention provides a compound for use as a protein kinase B inhibitor, the AΒ compound being a compound of the formula I or salts, solvates, tautomers or Noxides thereof. Compds. of formula I where in T is N or CR5; J1-J2 is N=CR6, R7C=N, R8NCO, (R8)2CO, N=N, or R7C=CR6; E is 5- to 6-membered carbocyclic or heterocyclic group; Q1 is a bond, C1-3 saturated hydrocarbon where one of the carbon atoms may be optionally replaced by O or N, or an adjacent pair of carbons be replaced by CONH and derivs., or NHCO and derivs.; Q2 is a bond, (un) substituted saturated C1-3 hydrocarbon, where one of the carbon atoms my be optionally replaced by N or O; G is H, NH2 and derivs., OH, or SH, with the provision that E is (hetero)aryl and Q2 is a bond, then G is H; R1 is H, or (hetero)aryl; R4, R6, and R8 are independently H, halo, C1-5 saturated hydrocarbyl, CN, CONH2, CONHR9, CF3, NH2, NHCOR9, or NHCONHR9; R5 and R7 are independently H, halo, C1-5 saturated heterocarbyl, CN, or CF3; R9 is (un) substituted Ph, or (un) substituted Bn; or their pharmaceutically acceptable salts, solvates, tautomers, or N-oxides thereof. Example compound II was prepared by amination of 9-(tetrahydropyran-2-yl)-6-chloropurine with 4-(N-Boc)piperidine; the resulting [1-[9-(tetrahydropyran-2-y1)-9H-purin-6yl]piperidin-4- yl]carbamic acid tert-Bu ester underwent methylation with Me

iodide to give methyl-[1-[9-(tetrahydropyran-2-yl)-9H-purin-6-yl]piperidin-4-yl]carbamic acid tert-Bu ester, which underwent hydrolysis to give example compound II. All the invention compds. were tested for their protein kinase inhibitory activity. From the assay it was determined that compound II and some of the other example compds. exhibited IC50 values of less than 10  $\mu\text{M}$  against both protein kinase A and B. The invention compds. were also evaluated for their antiproliferative activity. Many of the invention compds. were found to have IC50 values of less than 25  $\mu\text{M}$  and the preferred compds. have IC50 values of less than 15  $\mu\text{M}$ .

IT 669068-16-0P 885500-47-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

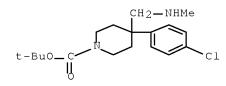
(intermediate; preparation of ortho-condensed pyridine and pyrimidine derivs. (e. g. purines) as protein kinases inhibitors useful for treatment of protein kinase mediated diseases such as proliferative diseases)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 885500-47-0 CAPLUS

CN 1-Piperidinecarboxylic acid,  $4-(4-\text{chlorophenyl})-4-[(\text{methylamino})\,\text{methyl}]-$ , 1,1-dimethylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1289687 CAPLUS Full-text

DOCUMENT NUMBER: 144:51568

TITLE: Preparation of substituted 2-quinolyl-oxazoles and

their heterocyclic analogs useful as pde4 inhibitors

INVENTOR(S): Kuang, Rongze; Blythin, David; Shih, Neng-Yang; Shue,

Ho-Jane; Chen, Xiao; Cao, Jianhua; Gu, Danlin; Huang,

Ying; Schwerdt, John H.; Ting, Pauline C.; Wong,

Shing-Chun; Xiao, Li

PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: PCT Int. Appl., 233 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

									APPLICATION NO.									
	2005																	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
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		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	
		NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	
		SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	
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US	2006	0106	062		A1		2006	0518		US 2	005-	1303	59		2	0050	516	
EP	1758	883			A1		2007	0307		EP 2	005-	7500	76		2	0050	516	
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IN	2006	CN04	254		Α		2007	0629					54			0061	117	
NO	2006	0058	30		А		2007	0216								0061		
PRIORIT	ORITY APPLN. INFO.:									US 2	004-	5722	66P		P 2	0040	518	
													134		W 2	0050	516	
OTHER SO	OURCE	(S):			CAS:	REAC	CT 14	4:51	568;	MAR	PAT.	144:	5156	8				
GI																		

$$R^{2}$$
 $R^{3}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 

AB Title compds. I [R1 = H, alkyl, cycloalkyl; R2, R3 and R5 independently = H or halo; R4 = H, halo, alkyl, etc.; A = substituted oxazolyl, imidazole, thiazole or pyrrole], and their pharmaceutically acceptable salts, are prepared and disclosed as pde4 inhibitors. Thus, e.g., II was prepared in a multistep synthesis from 2-trifluoromethyl-8-methoxyquinolin-5-yl carboxylic acid. In PDE4 assays, selected compds. possessed IC50 values ranging from 0.01-1.8 nM. Also claimed are pharmaceutical compns., the use of the compds. as PDE4 inhibitors, and combinations with other actives.

IT 871000-79-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted quinolyloxazoles and their heterocyclic analogs useful as PDE4 inhibitors)

RN 871000-79-2 CAPLUS

CN Acetamide, N-[[1-[[5-(aminomethyl)-2-[8-methoxy-2-(trifluoromethyl)-5-quinolinyl]-4-oxazolyl]carbonyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470969 CAPLUS Full-text

DOCUMENT NUMBER: 143:26636

TITLE: Preparation of 4-[(Arylmethyl)aminomethyl]piperidines

as inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S):
Bosch, Michael; Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr. SOURCE: Fr. Demande, 31 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						DATE		-	APPL	JICAT	ION 1	NO.		D.	ATE	
	2862				A1		2005	0603		FR 2	2003-	1417	2		2	0031	201
FR	2862	968			В1		2006	0804									
WO	2005	0542	29		A1		2005	0616	,	WO 2	2004-	FR30	66		2	0041	130
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	TG												
EP	1694	668			A1		2006	0830		EP 2	2004-	8055	90		2	0041	130
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,
		HR,	IS,	YU													
JP	2007	5123	84		Τ		2007	0517	1	JP 2	2006-	5419	74		2	0041	130
US	2007	0037	819		A1		2007	0215		US 2	2006-	4205	05		2	0060	526
RIORIT	Y APP	LN.	INFO	.:						FR 2	2003-	1417.	2	ž	A 2	0031	201
									,	WO 2	2004-	FR30	66	Ţ	W 2	0041	130
THER SO	THER SOURCE(S):				MARI	PAT	143:	26636	6								

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein X = (CH2)n; n = 1-2; R1 = CF3; R2 = H, alkyl; R3 = (un)substituted pyrrolyl, 1,2,3-thiadiazolyl, pyrazinyl, etc.; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II was prepared by reacting 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-

ethanone (preparation given) and 1-methyl-2-pyrrolecarboxaldehyde in THF in the presence of NaBH(OAc)3/AcOH. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of  $10-11~\mathrm{M}$  to  $10-6~\mathrm{M}$  at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of  $10-11~\mathrm{M}$  to  $10-6~\mathrm{M}$ at the cellular level. 852936-29-9P, [(1-Methyl-1H-pyrrol-2-yl)methyl][[1-[[4-(pyrazin-2v1)piperazin-1-v1]acety1]-4-[3-(trifluoromethy1)phenv1]piperidin-4vl]methyl]amine 852936-31-3P 852936-32-4P, N-Methyl-1-[1-[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-[(1,3-thiazol-2yl)methyl]methanamine trihydrochloride 852936-33-5P, (2-Furylmethyl) [[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-34-6P , (3-Furylmethyl)[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-35-7P , [(5-Methyl-2-furyl)methyl][[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-36-8P, [(4,5-Dimethyl-2-furyl)methyl](methyl)[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidi n-4-yl]methyl]amine trihydrochloride 852936-37-9P, [(5-Chloro-2-furyl)methyl](methyl)[[1-[[4-(pyrazin-2-yl)piperazin-1yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-38-0P, [[1-[[4-(Pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(2-thienyl)methyl]amine 852936-39-1P, [[1-[[4-(Pyrazin-2-v1)piperazin-1-v1]acety1]-4-[3-(trifluoromethyl)phenyl|piperidin-4-yl|methyl|[(3-thienyl)methyl|amine 852936-40-4P, 1-Phenyl-N-[[1-[[4-(pyrazin-2-yl)piperazin-1yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methanamine 852936-41-5P, [[1-[[4-(Pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(pyridin-2-yl)methyl]amine 852936-42-6P, N-Methyl-1-[1-[[4-(pyrazin-2-yl)piperazin-1yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-[(pyridin-2yl)methyl]methanamine 852936 - 43 - 7P, N-Methyl-1-[1-[[4-(pyrazin-2yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-[(pyridin-3-y1)methyl]methanamine tetrahydrochloride 852936-44-8P , N-Methyl-1-[1-[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-[(pyridin-4yl)methyl]methanamine tetrahydrochloride 852936-45-9P, N-Methyl-1-(pyrazin-2-yl)-N-[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methanamine tetrahydrochloride 852936-46-0P, [(6-Methylpyridin-2v1) methyl] [[1-[[4-(pyrazin-2-v1)piperazin-1-v1]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-47-1P , [(3-Methyl-2-thienyl)methyl][[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride 852936-48-2P 852936-49-3P, N-Methyl-1-[1-[[4-(pyrazin-2- $\verb|yl||piperazin-1-yl||acetyl||-4-[3-(trifluoromethyl)|phenyl||piperidin-4-yl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-||acetyl||-N-$ [(pyrimidin-5-yl)methyl]methanamine 852936-50-6P, (1H-Imidazol-2-ylmethyl) (methyl) [[1-[[4-(pyrazin-2-yl)piperazin-1yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-51-7P, (1H-Imidazol-5-ylmethyl)(methyl)[[1-[[4-(pyrazin-2yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4yl]methyl]amine tetrahydrochloride 852936-52-8P, N-Methyl-1-(4-methyl-1H-imidazol-5-yl)-N-[[1-[[4-(pyrazin-2-yl)piperazin-1-yl)piperazin-1-yl)piperazin-1-yl)piperazin-1-ylpipeyl]acetyl]-4-[3-(trifluoromethyl)phenyl]pyridin-4-yl]methyl]methanamine RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of 4-[(arylmethyl)aminomethyl]piperidines as

ΙT

NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)  $\,$ 

RN 852936-29-9 CAPLUS

CN Ethanone, 1-[4-[[[(1-methyl-1H-pyrrol-2-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c}
\text{Me} \\
\text{N} \\
\text{CH}_2 - \text{NH} - \text{CH}_2
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{C} \\
\text{CH}_2 - \text{NH} - \text{CH}_2
\end{array}$$

RN 852936-31-3 CAPLUS

CN Ethanone, 1-[4-[[methyl](1-methyl-1H-imidazol-2-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 852936-30-2 CMF C29 H37 F3 N8 O

$$\begin{array}{c}
\text{Me} \\
\text{N} \\
\text{CH}_2 \\
\text{N} \\
\text{CH}_2 \\
\text{CH}_2
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{C} \\
\text{CH}_2 \\
\text{N} \\
\text{C}
\end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 852936-32-4 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-thiazolylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c}
\text{Me} \\
\text{CH}_2 \\
\text{N}_3 \\
\text{CH}_2
\end{array}$$

$$\begin{array}{c}
\text{N}_1 \\
\text{C}_2 \\
\text{CH}_2
\end{array}$$

$$\begin{array}{c}
\text{N}_2 \\
\text{N}_3 \\
\text{C}_4
\end{array}$$

$$\begin{array}{c}
\text{N}_1 \\
\text{N}_2
\end{array}$$

$$\begin{array}{c}
\text{N}_2 \\
\text{N}_3
\end{array}$$

$$\begin{array}{c}
\text{N}_3 \\
\text{HC1}
\end{array}$$

RN 852936-33-5 CAPLUS
CN Ethanone, 1-[4-[[(2-furanylmethyl)amino]methyl]-4-[3(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl](CA INDEX NAME)

RN 852936-34-6 CAPLUS
CN Ethanone, 1-[4-[[(3-furanylmethyl)amino]methyl]-4-[3(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl](CA INDEX NAME)

RN 852936-35-7 CAPLUS
CN Ethanone, 1-[4-[[[(5-methyl-2-furanyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-36-8 CAPLUS

CN Ethanone, 1-[4-[[[(4,5-dimethyl-2-furanyl)methyl]methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{Me} \end{array} \begin{array}{c} \text{Me} \\ \text{CH}_2 \\ \text{N} \end{array} \begin{array}{c} \text{CH}_2 \\ \text{CH}_2 \\ \text{F}_3 \\ \text{C} \end{array}$$

●3 HC1

RN 852936-37-9 CAPLUS

CN Ethanone, 1-[4-[[[(5-chloro-2-furanyl)methyl]methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$C1 \xrightarrow{\text{Me}} CH_2 \xrightarrow{\text{N}} CH_2$$

RN 852936-38-0 CAPLUS

CN Ethanone, 2-[4-(2-pyrazinyl)-1-piperazinyl]-1-[4-[[(2-thienylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-(CA INDEX NAME)

RN 852936-39-1 CAPLUS

CN Ethanone, 2-[4-(2-pyrazinyl)-1-piperazinyl]-1-[4-[[(3-thienylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-(CA INDEX NAME)

$$CH2$$

$$CH2$$

$$CH2$$

$$CH2$$

$$CH2$$

$$CH3$$

$$CH3$$

RN 852936-40-4 CAPLUS

CN Ethanone, 1-[4-[[(phenylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CF 3} \\ \text{CH}_2 \text{NH-CH}_2 \text{-Ph} \\ \text{N} \end{array}$$

RN 852936-41-5 CAPLUS

CN Ethanone, 2-[4-(2-pyrazinyl)-1-piperazinyl]-1-[4-[[(2-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

RN 852936-42-6 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-43-7 CAPLUS

CN Ethanone, 1-[4-[[methyl(3-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

$$\begin{array}{c} \text{F}_{3}\text{C} \\ \text{O} \\ \text{N} \\ \text{CH}_{2} \\ \text{CH}_{2}$$

**●**4 HCl

RN 852936-44-8 CAPLUS

CN Ethanone, 1-[4-[[methyl(4-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

RN 852936-45-9 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-pyrazinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

$$\begin{array}{c} \text{F}_3\text{C} \\ \text{O} \\ \text{N} \\ \text{CH}_2 \\ \text{N} \end{array} \begin{array}{c} \text{Me} \\ \text{CH}_2 \\ \text{N} \\ \text{N} \end{array}$$

●4 HCl

RN 852936-46-0 CAPLUS

CN Ethanone, 1-[4-[[(6-methyl-2-pyridinyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c} \text{F}_{3}\text{C} \\ \text{O} \\ \text{N} \\ \text{O} \\ \text{N} \\ \text{O} \\ \text{CH}_{2} - \text{NH} - \text{CH}_{2} \\ \text{NH} \\ \text{O} \\ \text{N} \\ \text{Me} \\ \end{array}$$

RN 852936-47-1 CAPLUS

CN Ethanone, 1-[4-[[[(3-methyl-2-thienyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

RN 852936-48-2 CAPLUS

CN Ethanone, 1-[4-[[methyl](5-methyl-2-thienyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 852936-49-3 CAPLUS

CN Ethanone, 1-[4-[[methyl(5-pyrimidinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c} \text{F}_{3}\text{C} \\ \text{O} \\ \text{N} \end{array}$$

RN 852936-50-6 CAPLUS

CN Ethanone, 1-[4-[[(1H-imidazol-2-ylmethyl)methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c}
\text{Me} \\
\text{CH}_2 - \text{N-CH}_2
\end{array}$$

$$\begin{array}{c}
\text{N-CH}_2 - \text{N-CH}_2$$

$$\begin{array}{c}
\text{N-CH}_2 - \text{N-CH}_2
\end{array}$$

RN 852936-51-7 CAPLUS

CN Ethanone, 1-[4-[[(1H-imidazol-5-ylmethyl)methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

$$\begin{array}{c}
\text{Me} \\
\text{N}
\end{array}$$

$$\begin{array}{c}
\text{CH}_2 \\
\text{N}
\end{array}$$

$$\begin{array}{c}
\text{CH}_2 \\
\text{F}_3 \\
\text{C}
\end{array}$$

●4 HCl

RN 852936-52-8 CAPLUS

CN Ethanone, 1-[4-[[methyl](4-methyl-1H-imidazol-5-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

IT 852936-54-0P, tert-Butyl [[1-[2-[4-(2-pyrazinyl)-1 piperazinyl]acetyl]-4-[3-(trifluoromethyl)phenyl]-4 piperidinyl]methyl]carbamate
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (intermediate; preparation of 4-[(arylmethyl)aminomethyl]piperidines as NGF
 binding inhibitors to p75NTR receptor and of the apoptosis induced by

RN 852936-54-0 CAPLUS

CN Carbamic acid, methyl[[1-[(4-pyrazinyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CF 3} \\ \text{Me O} \\ \text{CH}_2 - \text{N} - \text{C} - \text{OBu-t} \end{array}$$

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 10 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN 2005:470968 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 143:26635

TITLE: Preparation of (4-Phenylpiperazin-1-yl)acylpiperidine

derivatives as inhibitors of NGF binding (nerve growth

factor) to p75NTR (p75 neurotrophic) receptor for

treating p75NTR related diseases Dos Santos, Victor; Wagnon, Jean

Sanofi-Synthelabo, Fr. PATENT ASSIGNEE(S): SOURCE: Fr. Demande, 49 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PA:	TENT	NO.			KINI	)	DATE			APPLICATION NO.						DATE		
FR	2862	967			A1		2005	0603		 FR 2	003-	1417.	3		2	0031	201	
FR	2862	967			В1		2006	0804										
WO	2005	0542	27		A1		2005	0616		WO 2	004-	FR30	67		2	0041	130	
	W:	ΑE,	AG,	AL,	ΑM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	
	LK, LR, LS,				LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,	
	NO, NZ, OM,				PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW: BW, GH, GM,				ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	
		NE,	SN,	TD,	ΤG													
EP	1699	778			A1		20060913			EP 2004		4-805591			2	20041130		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	
		HR,	IS															
JP	JP 2007512385				T		2007	0517		JP 2006-541975					2	0041	130	
US	US 20070021609					A1 20070125			US 2006-420508						20060526			
PRIORITY	ORITY APPLN. INFO.:									FR 2	003-	1417.	3		A 2	0031	201	
										WO 2	004-	FR30	67	1	W 2	0041	130	
OTHER SO	HER SOURCE(S):					MARPAT 143:26635			5									

GΙ

AΒ Title compds. I [wherein n = 1-2; R1 = halo, CF3, alkyl, alkoxy, OCF3; R2 = H, halo; R3 = H, OH and derivs., NH2 and derivs., etc.; R4 = (un)substituted Ph; their free bases, or acid addition salts, and their hydrates or solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II.HCl was prepared by reacting 2-chloro-1-[4-hydroxy-4-[3- (trifluoromethyl)phenyl]-1piperidinyl]-1-ethanone (preparation given) with 1-[3-(trifluoromethyl)phenyl]piperazine in the presence of KI/K2CO3/MeCN. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of  $10-11~\mathrm{M}$  to  $10-6~\mathrm{M}$  at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M at the cellular level. 852937-04-3P, [[1-[(4-Phenylpiperazin-1-yl)acetyl]-4-[3-IT(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride 852937-05-4P, (2-Furylmethyl)[[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852937-06-5P, [[1-[(4-Phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(2-thienyl)methyl]amine 852937-09-8P 852937-11-2P, [[1-[(4-Phenylpiperazin-1yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(pyridin-3yl)methyl]amine dioxalate 852937-13-4P 852937-14-5P, N-Methyl-1-[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methanamine dihydrochloride 852937-15-6P, N,N-Dimethyl-1-[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methanamine 852937-16-7P , N-Methyl-N-[[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-yl](trifluoromethyl)phenyl]piperidin-4-yl]methyl]ethanamine dihydrochloride 852937-17-8P, [[1-[[4-(4-Fluorophenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride 852937-18-9P, [[1-[[4-(3-Methoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine dihydrochloride 852937-19-0P, [[1-[[4-(3,4-Dichlorophenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852937-20-3P, [[1-[[4-(2,4-Dimethylphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methylamine dihydrochloride 852937-21-4P, [[1-[[4-(2,4-Dimethylphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperid

in-4-yl]methyl]dimethylamine dihydrochloride 852937-22-5P, [[1-[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride 852937-23-6P, [[1-[[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]dimethylamine trihydrochloride 852937-24-7P, N-Ethyl-N-[[1-[[4-(3methoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidi n-4-y1]methy1]ethanamine dihydrochloride 852937-26-9P, [[1-[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methylamine 852937-39-4P, [[1-[[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(2furyl)methyl]methylamine 852937-40-7P, 9-(3-Furylmethyl)[[1-[(4phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4yl]methyl]amine 852937-41-8P, [[1-[[4-(2,3-Dimethylphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperid in-4-yl]methyl]amine 852937-47-4PRL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (drug candidate; preparation of phenylpiperazinylacylpiperidines as NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by

RN 852937-04-3 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

■3 HCl

RN 852937-05-4 CAPLUS

CN Ethanone, 1-[4-[[(2-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

RN 852937-06-5 CAPLUS

RN 852937-09-8 CAPLUS CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[[(2-

pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl], ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 852937-08-7 CMF C31 H36 F3 N5 O

$$F_3C \xrightarrow{CH_2} N \xrightarrow{C} CH_2 \xrightarrow{N} Ph$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 852937-11-2 CAPLUS

CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[[(3-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, ethanedioate (1:2) (CA INDEX NAME)

CM 1

CRN 852937-10-1 CMF C31 H36 F3 N5 O

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 852937-13-4 CAPLUS

CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[(4-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-1, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 852937-12-3 CMF C31 H36 F3 N5 O

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 852937-14-5 CAPLUS

CN Ethanone, 1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-15-6 CAPLUS

CN Ethanone, 1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

RN 852937-16-7 CAPLUS

CN Ethanone, 1-[4-[(ethylmethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

RN 852937-17-8 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(4-fluorophenyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

■3 HC1

RN 852937-18-9 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3-methoxyphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

$$N - CH_2 - CH_2 - NH_2$$

MeO

P2 HC1

RN 852937-19-0 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3,4-dichlorophenyl)-1-piperazinyl]- (CA INDEX NAME)

RN 852937-20-3 CAPLUS

CN Ethanone, 2-[4-(2,4-dimethylphenyl)-1-piperazinyl]-1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-21-4 CAPLUS

CN Ethanone, 1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2,4-dimethylphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

$$\begin{array}{c} \text{CF3} \\ \text{Me} \\ \text{Me} \end{array}$$

●2 HCl

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

HC1

RN 852937-23-6 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, hydrochloride (1:3) (CA INDEX NAME)

●3 HC1

RN 852937-24-7 CAPLUS

CN Ethanone, 1-[4-[(diethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3-methoxyphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-26-9 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

RN 852937-39-4 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[[(2-furanylmethyl)methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

$$\bigcirc \mathsf{CH}_2 - \mathsf{N} - \mathsf{CH}_2 - \mathsf{N} - \mathsf{CH}_2 - \mathsf{N}$$

RN 852937-40-7 CAPLUS

CN Ethanone, 1-[4-[[(3-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

PAGE 2-A

RN 852937-41-8 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2,3-dimethylphenyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CF}_3 \\ \text{N} \\ \text{Me} \end{array}$$

RN 852937-47-4 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)

$$F_{3}C$$
 $CH_{2}$ 
 $NH_{2}$ 
 $CH_{2}$ 
 $NH_{2}$ 

● HCl

IT 852937-43-0P, tert-Butyl 4-(Aminomethyl)-4-[3(trifluoromethyl)phenyl]piperidine-1-carboxylate 852937-44-1P,
tert-Butyl 4-[(Dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]piperidi
ne-1-carboxylate 852937-48-5P, tert-Butyl [[1-[2-(4phenylpiperazin-1-yl)ethanoyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4yl]methyl]carbamate 852937-49-6P, tert-Butyl
methyl[[1-[2-(4-phenylpiperazin-1-yl)ethanoyl]-4-[3(trifluoromethyl)phenyl]piperidin-4-yl]methyl]carbamate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
 (intermediate; preparation of phenylpiperazinylacylpiperidines as NGF
binding inhibitors to p75NTR receptor and of the apoptosis induced by
NGF)

RN 852937-43-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 852937-44-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 852937-48-5 CAPLUS

CN Carbamic acid, [[1-[(4-phenyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$F_{3}C \longrightarrow CH_{2} \longrightarrow N \longrightarrow CH_{2} \longrightarrow N \longrightarrow N$$

RN 852937-49-6 CAPLUS

CN Carbamic acid, methyl[[1-[(4-phenyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$F_3C \xrightarrow{\qquad \qquad \qquad \\ C} CH_2 \xrightarrow{\qquad \qquad \\ N} C \xrightarrow{\qquad \qquad \\ C} CH_2 \xrightarrow{\qquad \qquad \\ N} Ph$$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:220128 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 142:298111

TITLE: Preparation of 2-substituted benzimidazole piperidines

as selective melanin concentrating hormone receptor antagonists for the treatment of obesity and related

disorders

INVENTOR(S): Burnett, Duane A.; Wu, Wen-Lian; Sasikumar,

Thavalakulamgara K.; Greenlee, William J.; Caplen,

Mary Ann; Guo, Tao; Hunter, Rachael Catherine

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 57 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
US 20050054628	A1 20050310	US 2004-926557	20040826
CA 2536929	A1 20050317	CA 2004-2536929	20040826
WO 2005023798	A1 20050317	WO 2004-US27734	20040826
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG, ES,	FI, GB, GD,
GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG, KP,	KR, KZ, LC,
LK, LR, LS,	LT, LU, LV, MA,	MD, MG, MK, MN, MW, MX,	MZ, NA, NI,
NO, NZ, OM,	PG, PH, PL, PT,	RO, RU, SC, SD, SE, SG,	SK, SL, SY,
TJ, TM, TN,	TR, TT, TZ, UA,	UG, US, UZ, VC, VN, YU,	ZA, ZM, ZW
RW: BW, GH, GM,	KE, LS, MW, MZ,	NA, SD, SL, SZ, TZ, UG,	ZM, ZW, AM,
AZ, BY, KG,	KZ, MD, RU, TJ,	TM, AT, BE, BG, CH, CY,	CZ, DE, DK,

EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 1664022 20060607 EP 2004-782252 20040826 Α1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR CN 1845916 Α 20061011 CN 2004-80024937 20040826 JP 2007504146 Τ JP 2006-524846 20070301 20040826 MX 2006PA02372 Α 20060620 MX 2006-PA2372 20060228 PRIORITY APPLN. INFO.: US 2003-498876P Ρ 20030829 WO 2004-US27734 W 20040826

Т

OTHER SOURCE(S):

CASREACT 142:298111; MARPAT 142:298111

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$$\begin{array}{c|c} Ar & & \\ \hline \\ N \\ R \\ \end{array}$$

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

AΒ (hetero)aryl, R1 = H, alkyl, cycloalkyl, etc.; R4 = OH, alkoxy, etc.] are prepared For instance, II is prepared in 9 steps from 4-aminomethyl-1-benzyl-4-phenylpiperidine, 4,5-difluorobenzene-1,2-diamine and 3-cyanobenzeneboronic acid. In a selected example, a Ki of 3 nM for the melanin concentrating hormone (MCH) receptor is observed I are useful in treating obesity, metabolic disorders, eating disorders, e.g., hyperphagia and diabetes. 847614-74-8P ΤТ

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

ΙI

(preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders)

847614-74-8 CAPLUS RN

1-Piperidinecarboxylic acid, 4-(3'-cyano[1,1'-biphenyl]-4-yl)-4-[(5,6-CN difluoro-1H-benzimidazol-2-yl)amino]methyl]-, methyl ester (CA INDEX NAME)

IT 847615-45-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders)

RN 847615-45-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-bromophenyl)-4-[[(5,6-difluoro-1H-benzimidazol-2-yl)amino]methyl]-, methyl ester (CA INDEX NAME)

IT 847614-99-7P 847615-00-3P 847615-01-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders)

RN 847614-99-7 CAPLUS

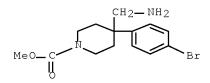
CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(2,2,2-trifluoroacetyl)amino]methyl]-, methyl ester (CA INDEX NAME)

RN 847615-00-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-bromophenyl)-4-[[(2,2,2-

RN 847615-01-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-bromophenyl)-, methyl ester (CA INDEX NAME)



L3 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:872662 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 141:366128

TITLE: Preparation of cycloalkylcarbonyl or

heterocycloalkylcarbonyl-substituted spiropiperidines as melanocortin-4 receptor agonists for the treatment

of conditions such as obesity

INVENTOR(S): Guo, Liangqin; He, Shuwen; Jian, Tianying; Lai,

Yingjie; Liu, Jian; Nargund, Ravi P.; Sebhat, Iyassu K.; Ujjainwalla, Feroze; Ye, Zhixiong; Young, Jonathan

R.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 200 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	I TNI	NO.			KIN	D	DATE			APPL:	ICAT	ION I	NO.		D.	ATE	
WO 2					A2		2004		1	WO 2	004-	US97	51		2	0040	331
WO 2	W:	04089307 A3 : AE, AG, AL, AM, A CN, CO, CR, CU, C					AU,	AZ,		•			•	•		•	
			•		•		DE, ID,			•			•	•		•	
		,	•	,	•		LV, PL,	•		•	•	•	•	•	•	•	,
			TM,	•	•		TZ,			US,	UZ,		•	YU,	ZA,	•	

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BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
    AU 2004227835
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                                                                  20040331
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    AU 2004227835
                         В2
                               20070614
    CA 2520114
                         Α1
                               20041021
                                           CA 2004-2520114
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    EP 1613601
                         Α2
                               20060111
                                           EP 2004-749540
                                                                  20040331
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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                               20060418
                                           BR 2004-9078
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    CN 1768041
                         Α
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                                                                  20040331
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                         Τ
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                         В2
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                                           CN 2007-10141003
    CN 101108825
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    US 7329673
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                                           ZA 2005-7638
                         Α
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    IN 2005DN04299
                         Α
                               20070831
                                           IN 2005-DN4299
                                                                  20050922
                               20051215
                                           MX 2005-PA10724
    MX 2005PA10724
                         Α
                                                                  20051004
    NO 2005005166
                               20051230
                                           NO 2005-5166
                         Α
                                                                  20051103
PRIORITY APPLN. INFO.:
                                           US 2003-460293P
                                                             P 20030404
                                           CN 2004-80009148 A3 20040331
                                           WO 2004-US9751 W 20040331
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OTHER SOURCE(S): MARPAT 141:366128

GΙ

AΒ Title compds. I or II [X,Y = R62C, R9N, C(:0); Y,X = R62C, R6N, C(:0), R6N:C, O, S, S(:0), SO2; XY = CR6:CR6; Z = R1C, N; A = (CH2)m; E = (CH2)p; R1 = H,amidino, (un) substituted aminoalkyl, iminoylalkyl, alkyl, cycloalkylalkyl, phenylalkyl, naphthylalkyl, or heteroarylalkyl; R2 = (un)substituted Ph, naphthyl, heteroaryl; R4 = H, (un)substituted alkyl, halogen, alkoxy, O2N, F3C, F3CCH2, F3CO, F3CCH2O; R6, R9 = H, (un)substituted alkyl, phenylalkyl, naphthylalkyl, heteroarylalkyl, cycloalkylalkyl, heterocycloalkylalkyl, aminoalkyl, carboxyalkyl, etc.; m , p = 1, 2; n = 0-3] such as III $\bullet$ HCl are prepared as melanocortin-4 receptor agonists for the treatment of obesity and related conditions such as diabetes, bulimia, insulin resistance, and hyperlipidemia; a variety of other conditions, particularly male and female sexual dysfunction and erectile dysfunction, are also potentially treatable with the title compds. Oxoindanospiropiperidinecarboxylate IV is reduced with sodium borohydride and the alc. eliminated in the presence of ptoluenesulfonic acid to give the indenespiropiperidinecarboxylate; Jacobsen epoxidn. of the indene double bond, opening of the epoxide with sodium azide, aziridine formation using a fluorous phosphine, N-methylation of the aziridine, regioselective reduction of the aziridine with sodium borohydride to yield the aminoindanospiropiperidinecarboxylate, acylation with 2acetoxyisobutyryl chloride, hydrolysis of the ester with sodium methoxide and methylation of the alc. with Me iodide, deprotection of the piperidine nitrogen, and acylation with nonracemic trans-4-(2,4- difluorophenyl)-1-tertbutyl-3-pyrrolidinecarboxylic acid yields III. Some of the title compds. bind to the melanocortin-4 receptor with IC50 values of <10  $\mu M$  and <5  $\mu M$  (no data). ΙT 778627-62-6P 778627-63-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of cycloalkylcarbonyl or

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

heterocycloalkylcarbonyl-

substituted spiropiperidines as melanocortin-4 receptor agonists for the treatment of conditions such as obesity and male or female sexual dysfunction)  $\frac{1}{2}$ 

RN 778627-62-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chloro-3-methylphenyl)-, ethyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{C1} \\ \end{array}$$

RN 778627-63-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4[[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

L3 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:550937 CAPLUS Full-text

DOCUMENT NUMBER: 141:106379

TITLE: A preparation of (piperidinylmethyl)amine derivatives,

useful as NK1 antagonists and selective serotonin

reuptake inhibitors (SSRI)

INVENTOR(S): Bernstein, Peter; Warwick, Paul

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
WO 2	2004	0567	71		A1		2004	 0708	,	WO 2	003-	SE20	0 4		2	0031	218
	W:	ΑE,	AG,				AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΙ,	NO,
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	

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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003291589
                                20040714
                                          AU 2003-291589
                          Α1
                                                                    20031218
     EP 1581495
                          Α1
                                20051005
                                            EP 2003-768468
                                                                    20031218
     EP 1581495
                          В1
                                20070418
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2006512363
                          Τ
                                20060413
                                            JP 2004-562205
                                                                    20031218
     AT 360001
                                            AT 2003-768468
                                                                    20031218
                          Τ
                                20070515
                                            ES 2003-768468
     ES 2286470
                          Т3
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                                            US 2005-539140
     US 20060058352
                          Α1
                                20060316
                                                                    20050616
PRIORITY APPLN. INFO.:
                                            US 2002-435130P
                                                                P 20021220
                                            WO 2003-SE2004
                                                                W 20031218
OTHER SOURCE(S):
                        MARPAT 141:106379
GΙ
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$$R^3$$
 $R^3$ 
 $R^3$ 

The invention relates to a preparation of piperidinylamine derivs. of formula I [wherein: R1 and R2 are independently selected from H, CN, CF3, OCF3, halogen, or alk(en/yn)yl, etc.; R3 is H or alkyl; R4 is H, CN, alkyl, or alkoxy; R5 is H or alkyl; Ar is (un)substituted Ph], useful as NK1 antagonists and selective serotonin reuptake inhibitors (SSRI). The prepared invention compds. were screened in SERT binding assay (2nM < Ki < 180nM) and NK1 FLIPR assay (70nM < IC50 < 2 $\mu$ M). For instance, piperidine derivative II was prepared via amination of 1-iodomethyl-3- cyanonaphthalene by piperidine derivative III with a yield of 51% (example 1).

IT 669068-09-1P 669068-74-0P 719276-18-3P 719276-23-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of piperidinylamine derivs. with NK1 antagonist activity and SSRI activity)

RN 669068-09-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-74-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 719276-18-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 719276-23-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]methylami no]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

IT 719276-01-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of piperidinylamine derivs. with NK1 antagonist activity and SSRI activity)

RN 719276-01-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]amino]methyl]-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

IT 719276-25-2 719276-27-4

RL: RCT (Reactant); RACT (Reactant or reagent) (reactant; preparation of piperidinylamine derivs. with NK1 antagonist activity and SSRI activity)

RN 719276-25-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-methoxy-1-naphthalenyl)methyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethylester (CA INDEX NAME)

RN 719276-27-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-ethyl-1-naphthalenyl)methyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethylester (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:203811 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 140:253448

TITLE: Preparation of N-piperidinylmethyl naphthamide

derivatives as NK1 receptor antagonists and serotonin

reuptake inhibitors and their therapeutic uses

INVENTOR(S): Bernstein, Peter; Dantzman, Cathy; Dedinas, Robert;

Shen, Lihong; Warwick, Paul

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT :	NO.			KIN	D	DATE			APPI	LICAT	ION 1	NO.		D	ATE	
WO	2004	0204	11		A1	_	2004	0311		WO 2	2003-	SE13.	29		2	0030	826
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	, EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	, KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	, MW,	MX,	MΖ,	NI,	NO,	NZ,	OM,
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	, SG,	SK,	SL,	SY,	ΤJ,	TM,	TN,
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		KG,	KZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	, СН,	CY,	CZ,	DE,	DK,	EE,	ES,
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		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	, GW,	ML,	MR,	NE,	SN,	TD,	TG
AU	2003	2535	58		A1		2004	0319		AU 2	2003-	2535	58		2	0030	826
EP	1549	615			A1		2005	0706		EP 2	2003-	7915.	29		2	0030	826
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		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	, TR,	BG,	CZ,	EE,	HU,	SK	
JP	2006	5022	39		Τ		2006	0119		JP 2	2004-	5697	44		2	0030	826
US	2006	0241	142		A1		2006	1026		US 2	2005-	5253	03		2	0051	104
RIORIT	Y APP	LN.	INFO	.:						SE 2	2002-	2567			A 2	0020	829
										SE 2	2002-	2986			A 2	0021	009
										WO 2	2003-	SE13	29	1	W 2	0030	826
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OTHER SOURCE(S): MARPAT 140:253448

GΙ

$$R^3$$
 $R^4$ 
 $R^4$ 
 $R^2$ 
 $R^1$ 
 $R^2$ 
 $R^1$ 
 $R^2$ 
 $R^1$ 
 $R^2$ 
 $R^1$ 
 $R^2$ 
 $R^2$ 

N-piperidinylmethyl naphthamide derivs. (shown as I; variables defined below; e.g. II as monocitrate hemihydrate), in vivo-hydrolyzable precursors thereof, pharmaceutically-acceptable salts thereof, the use in therapy and pharmaceutical compns. and methods of treatment using the same are disclosed. For I: R1 = CN, CF3, OCF3, OCHF2, halogen, C2-4alkenyl, C2-4alkynyl, Ra, Rb, SRa, NRaRb, CH2NRaRb, ORa or CH2ORa, where Ra and Rb = H, C1-6-alkyl, C(O)Rc, C(O)NHRc or CO2Rc, where Rc = C1-6alkyl; or, Ra and Rb together are (CH2)jG(CH2)k or G(CH2)jG, where G is O or S, j = 1-4, and k = 0-2; m = 1-3 where at least one R1 moiety is other than H; R2 and R3 = H, C1-6alkyl or C1-

6alkyl substituted with C1-4alkoxy; R4 = H, CN, CF3, OCF3, OCHF2, halogen, C1-4alkyl, C2-4alkenyl, C2-4alkynyl, SRa, NRaRb, CH2NRaRb, ORa or CH2ORa, where Ra and Rb = H, C1-6alkyl, C(0)Rc, C(0)NHRc or CO2Rc where Rc = C1-6alkyl; or, Ra and Rb together are (CH2)jG(CH2)k or G(CH2)jG, and n is 0-3. Although the methods of preparation are not claimed, .apprx.80 example prepns. are included. For example, II was prepared from 3-cyano-1-naphthoyl chloride and 1-methyl-4-(3,4-dichlorophenyl)-4-(N- methylaminomethyl)piperidine; the 2nd reactant was prepared in 4 steps starting with cyclization of 3,4dichlorophenylacetonitrile with N-methylbis(2-chloroethyl)amine hydrochloride to give 1-methyl-4-(3,4- dichlorophenyl)-4-cyanopiperidine, which was hydrogenated to 1-methyl-4-aminomethyl-4-(3,4-dichlorophenyl)piperidine, which was ethoxycarbonylated to 1-methyl-4-(3,4-dichlorophenyl)-4-(ethoxycarbonylaminomethyl)piperidine, which was reduced with LiAlH4 to 1methyl-4-(3,4-dichlorophenyl)-4-(N-methylaminomethyl)piperidine. Compds. I exhibit a Ki of 1-100 nM in the SERT assay and have an IC50 = 1-100 nM in the NK1 FLIPR assav. 669068-08-0P, 1-Boc-4-(3,4-dichlorophenyl)-4-[[[(3-cyano-2-

ΙT methoxynaphth-1-yl)carbonyl]amino]methyl]piperidine 669068-09-1P , 1-Boc-4-aminomethyl-4-(3,4-dichlorophenyl)piperidine 669068-15-9P, 1-Boc-4-(4-chlorophenyl)-4-[[[(3-cyano-2methoxynaphth-1-yl)carbonyl]amino]methyl]piperidine 669068-16-0P , 1-Boc-4-aminomethyl-4-(4-chlorophenyl)piperidine 669068-23-9P, 1-Boc-4-(3,4-dichlorophenyl)-4-[[[(3-cyano-2,4-dimethoxynaphth-1yl)carbonyl]amino]methyl]piperidine 669068-27-3P, 1-Boc-4-(3,4-dichlorophenyl)-4-[[[(3-cyano-2-ethylnaphth-1vl)carbonyl]amino]methyl]piperidine 669068-73-9P, 1-Boc-4-(4-fluorophenyl)-4-[[[(3-cyanonaphth-1yl)carbonyl]amino]methyl]piperidine 669068-74-0P, 1-Boc-4-aminomethyl-4-(4-fluorophenyl)piperidine 669068-77-3P, 1-Boc-4-(4-fluorophenyl)-4-[[[(3-cyanonaphth-1yl)carbonyl](methyl)amino]methyl]piperidine 669068-82-0P, 1-Boc-4-(4-fluorophenyl)-4-[[[(3-cyano-2-ethylnaphth-1vl)carbonyl]amino]methyl]piperidine RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of N-piperidinylmethyl naphthamide derivs. as NK1 receptor antagonists and serotonin reuptake inhibitors and their therapeutic uses) 669068-08-0 CAPLUS RN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-methoxy-1-CN

naphthalenyl)carbonyl]amino]methyl]-4-(3,4-dichlorophenyl)-,

1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-09-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-15-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[[[(3-cyano-2-methoxy-1-naphthalenyl)carbonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-23-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2,4-dimethoxy-1-naphthalenyl)carbonyl]amino]methyl]-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-27-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-ethyl-1-naphthalenyl)carbonyl]amino]methyl]-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-73-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)carbonyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-74-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-77-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)carbonyl]methyla mino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-82-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-ethyl-1-naphthalenyl)carbonyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethylester (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1951:38847 CAPLUS

DOCUMENT NUMBER: 45:38847
ORIGINAL REFERENCE NO.: 45:6664c-q

TITLE: 4-Aryl-4-aminomethylpiperidines
INVENTOR(S): Kwartler, Charles E.; Lucas, Philip

PATENT ASSIGNEE(S): Sterling Drug Inc.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DAI	ľE
	US 2538107		19510116	US 1946-687216	194	160730
В	N-Substituted 4-ary	71 - 4 - (am)	inomethyl)pi	peridines possess val	ue as	analge
	antionagmodica and	0000+1	A C	o 4 phonulpipopidino	55 ~	in 400

AΒ esics, antispasmodics, and sedatives. 4-Cyano-4-phenylpiperidine 55 g. in 400 ml. 15% NH3 in MeOH with 500 lb. H and 20 g. Raney Ni 14 hrs. gave, on vacuum distillation of the filtrate, 47 g. 4-phenyl-4- (aminomethyl)piperidine (I), b4 154° (di-HCl salt, m. 252-4°), also obtained by hydrogenolysis of the 1benzyl derivative (II) of I over Pd sponge. From II 30 g. and H2NCONHNO2 14.4 g. in 450 cc. H20 at  $90^{\circ}$  was obtained on filtration 19 g. 1-benzyl-4-phenyl-4ureidomethylpiperidine, m. 172-3° (from aqueous Me2CO), converted by hydrogenolysis to 4-phenyl-4-(ureidomethyl)piperidine (III), m. 186-7° (from H2O). Similarly 7.3 g. 1-Me derivative of I, b12.5  $170-2^{\circ}$  (di-HCl salt, m.  $287-8^{\circ}$ ), gave 7 g. 1-Me derivative of III, m.  $200-1^{\circ}$ , and 11.2 g. I gave 1carbamyl derivative of III, 11 g., m. 205-6°. II 14 and MeSC(:NH)NH2.H2SO4 7 g. in 50 ml. H2O 15 hrs. at room temperature, then 1 hr. at 100°, gave PhCH2N(C2H4)2CPhCH2NHrC(:NH)NH2.0.5H2SO4, m. 122-5° (from H2O); drying at 100° converted it to a vitreous solid, m. about 150°, which analyzed satisfactorily for the above formula. From I 2.8 g. was obtained 3.5 g. H2NC(:NH)-N(C2H4)2CPhCH2NHC(:NH)NH2.H2SO4, m. 363-5° (decomposition). Reaction of the aminomethyl compds. with alkyl chloroformates gave the following 4phenylpiperidines: 1,4-Me(EtOCONHCH2), m. 86-8° 1,4-PhCH2(EtOCONH CH2) HCl salt, m. 233-5°; 1,4-PhCH2(MeOCONHCH2) HCl salt, m. 211° (decomposition); 1,4-PhCH2(PrOCONHCH2) HCl salt, m. 211-3° (decomposition); 1,4-PhCH2(BuOCONHCH2) HCl salt, m. 208-9° (pH 5.5 for 1% solution); 1,4-PhCH2(iso-BuOCONHCH2) HCl salt, 227° (pH 6); 1,4-PhCH2(AmOCONHCH2) HCl salt, 205-6° (pH 5.7 for 0.5%

solution); and 1,4-PhCH2(C6H13OCONHCH2) HCl salt, m.  $193-4^{\circ}$ . The pH of a 1% aqueous solution of PhCH2N(C2H4)2-CPhCH2NHAc.HCl, m.  $271-3^{\circ}$ , was 5.8. Cf. C.A. 45, 669q.

IT 873396-12-4P, 1-Piperidinecarboxamide, 4-phenyl-4-ureidomethyl-

RN 873396-12-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(aminocarbonyl)amino]methyl]-4-phenyl- (CA INDEX NAME)

$$H_2N$$
— $U$ — $NH$ — $CH_2$ — $N$ — $CH_2$ 

L3 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1951:3762 CAPLUS

DOCUMENT NUMBER: 45:3762
ORIGINAL REFERENCE NO.: 45:669g-i

TITLE: 4-Aryl-4-aminomethylpiperidines

PATENT ASSIGNEE(S): Sterling Drug Inc.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

4-Cyano-4-phenylpiperidine and H (Ni) form the 4-aminomethyl compound (I), b4 154° (di-HCl salt, m. 252-4°). The 1-Me derivative (II) of I, b12.5 170-2° (di-HCl salt, m. 287-8°), is prepared similarly. II and H2NCONHNO2 (III) form 1-methyl-4-phenyl-4- (ureidomethyl)piperidine (IV), m. 200-1°. I and III form the 1-H2NCO analog of IV, m. 205°. 1-PhCH2 analog (V) of IV, m. 172-3°. V and H (Pd) form 4-phenyl-4-(ureidomethyl)piperidine, m. 186-7°. Acylation of II with EtO2CCl forms the N-EtO2C derivative, m. 86-8°. 1-Benzyl-4-phenyl-4-(aminomethyl)piperidine and chloroformates or acyl chlorides form the HCl salts of the following N-carbalkoxy and acyl derivs. (N-substituent, m.p., and pH of solution given): MeO2C, 211°; EtO2C, 233-5°; PrO2C, 221-3°; BuO2C, 208-9°, 5.5 in 1% solution; iso-BuO2C, 227°, 6 in 1% solution; AmO2C, 205-6°, 5.7 in 0.5% solution; C6H11O2C, 193-4°; Ac, 271-3°, 5.8 in 1% solution

IT 873396-12-4P, 1-Piperidinecarboxamide, 4-phenyl-4-ureidomethyl-

RL: PREP (Preparation)

(preparation of)

RN 873396-12-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(aminocarbonyl)amino]methyl]-4-phenyl- (CA INDEX NAME)

L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1948:5791 CAPLUS Full-text

DOCUMENT NUMBER: 42:5791

ORIGINAL REFERENCE NO.: 42:1270f-i,1271a-d

TITLE: Preparation of substituted 4-(aminomethyl)piperidines

and their straight chain analogs

AUTHOR(S): Kwartler, Charles E.; Lucas, Philip

CORPORATE SOURCE: Sterling-Winthrop Research Inst., Rensselaer, NY SOURCE: Journal of the American Chemical Society (1947), 69,

2582-6

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

The following were prepared according to Eisleb (U.S. 2,167,351, C.A. 33, AΒ 8923.1): Et  $\gamma$ -dimethylamino- $\alpha$ -phenylbutyrate, b2 108° (HCl salt, m. 115-17°); γ-diethylamino analog, b3 132-3° (HCl salt, m. 89-90°). 1-Methyl-4-cyano-4phenylpiperidine (36 g.) in 400 cc. 15% MeOH-NH3, hydrogenated 20 hrs. over 10 g. Raney Ni at room temperature/500 lb., gives 66.7% 1-methyl-4-(aminomethyl)-4-phenylpiperidine (I), b12.5 170-2° (HCl salt, m. 287-8°); 1-benzyl analog (II), b0.5 201-2° (HCl salt, m. 229-31°). 4-Cyano-4-phenylpiperidine (b2 145-6°; picrate, m. 205-6°) (55 g.) in 500 cc. 10% MeOH-NH3, hydrogenated 14 hrs. over 20 g. Raney Ni at room temperature/500 lb., gives 47 g. 4-(aminomethyl)-4-phenylpiperidine (III), b4 154° (HCl salt, m. 252-4°); III results also (83.2% yield) by hydrogenating 31 g. II in 78 cc. EtOH and 6 cc. AcOH over 0.5 g. Pd at  $55^{\circ}/40$  lb. 4-Carbethoxy-4-phenylpiperidine b3  $154-5^{\circ}$  (HCl salt, m. 112-13°). II (30 g.) and 14.4 g. nitrourea in 450 cc. H2O, heated at 90° until gas evolution ceases, give 55% 1-benzyl-4-ureidomethyl- 4phenylpiperidine (IV), m.  $172-4^{\circ}$ ; 1-Me analog m.  $200-1^{\circ}$ . III (11.2 g.) and 14 g. nitrourea in 140 cc. H2O, heated 30 min. at 70°, give 80% 1-carbamyl-4ureidomethyl-4-phenylpiperidine (V), m. 205-6° (decomposition). Hydrogenation of IV in EtOH, AcOH, and H2O over PdCl2-C at 50-60°/45 lb. gives 4 g. 4ureidomethyl-4- phenylpiperidine, m. 186-7°; with nitrourea this yields V. 1-Carbamyl-4-carbethoxy-4-phenylpiperidine, m. 119-20°. 1-Diethylamino-3-phenyl-4-ureidobutane m. 83-4°. II (14 g.), 7 g. methylisothiourea sulfate, and 50 ml. H2O, stirred 15 hrs. at room temperature and heated 1 hr. on the steam bath, give 30-2% 1-benzyl-4- (guanidinomethyl)-4-phenylpiperidine sulfate, m. 150°; III gives 47% of the 1-quanyl analog (VI), m. 363-5° (decomposition); 1quanyl-4-carbethoxy-4-phenylpiperidine sulfate (VII), m. 276-7° (decomposition). I (8.16 g.) and 8.3 g. anhydrous K2CO3 in 75 ml. dioxane, treated dropwise with 4.34 g. C1CO2Et in ether and refluxed 90 min., give 45.3% 1-methyl-4-(carbethoxyaminomethyl)-4-phenylpiperidine, m. 86-8°. 2-Phenyl-4-(diethylaminobutyl)guanidine-HI, with 1 mol. H2O, m. 91-3°; pchlorophenyl analog m. 93-5°; 3,4-dichlorophenyl analog, with 1 mol. H2O, m. 122-3°. II (22.4 g.) in 100 ml. C5H5N, treated dropwise with 8.68 g. C1CO2Et in ether, kept 16 hrs. at room temperature, and heated 1 hr. at  $60^{\circ}$ , gives 71% 1-benzyl-4-(carbethoxyaminomethyl)-4-phenylpiperidine-HCl (VIII), m. 232-3° (decomposition); Me ester m. 210.6-11.2° (decomposition); Pr ester m. 219-27° (decomposition); Bu ester m. 208-8.8°; iso-Bu ester m. 226.6-7.4°; hexyl ester m.  $193-4^{\circ}$ . The majority of these compds. show mild spasmolytic action and

neg. analgesic action. The effect against acetylcholine spasms of the isolated rabbit ileum was negligible in all cases. Against BaCl2-induced spasms, VII was approx. 2.5 times as active as papaverine; the remaining compds. were less active. 1-Guanidino-2-phenyl-4-diethylaminobutane sulfate, VI, and VIII were of the same order of activity as papaverine against BaCl2-induced spasms of the isolated virgin guinea pig uterus; all the other compds. studied were less active.

RN 873396-12-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(aminocarbonyl)amino]methyl]-4-phenyl- (CA INDEX NAME)

=> file marpat TOTAL COST IN U.S. DOLLARS SINCE FILE ENTRY SESSION 93.13 FULL ESTIMATED COST 272.64 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -13.60-13.60

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FILE CONTENT: 1961-PRESENT VOL 148 ISS 25 (20080704/ED)

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US 20080119550 22 MAY 2008 DE 102007054884 21 MAY 2008 EΡ 1925296 28 MAY 2008 2008117905 22 MAY 2008 JΡ WO 2008061874 29 MAY 2008 2443936 21 MAY 2008 GB 2908651 23 MAY 2008 FR 2324697 20 MAY 2008 RU 2608608 30 APR 2008 CA

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99.3% PROCESSED 42083 ITERATIONS 60 ANSWERS

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SEARCH TIME: 00.00.55

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FILE COVERS 1907 - 10 Jul 2008 VOL 149 ISS 2 FILE LAST UPDATED: 9 Jul 2008 (20080709/ED)

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=> s L4 SSS full L5 60 L4

=> d ibib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 60 ANSWERS - CONTINUE? Y/(N):y L5 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:412119 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 148:403086

TITLE: Preparation of piperidine derivatives as

melanocortin-4 receptor modulators

INVENTOR(S): Bakshi, Raman K.; Dellureficio, James P.; Hong,

Qingmei; Jian, Tianying; Liu, Jian; Nargund, Ravi P.;

Ye, Zhixiong

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 141pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
	WO	2008	0394	 18		A2	_	2008	0403	,	WO 2	007-	US20	606		2	0070	924
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	BΖ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
			GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,
			ΚM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
			MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
			PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
			IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
			GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
			BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM									
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OTHER SOURCE(S): MARPAT 148:403086

GΙ

$$X \xrightarrow{Y} \mathbb{R}^3$$
 $\mathbb{R}^3$ 
 $\mathbb{R}^2$ 
 $\mathbb{R}^3$ 
 $\mathbb{R$ 

AB The title compds. with general formula I [wherein X = alkyl, -(CH2)n-cycloalkyl, (un)substituted -(CH2)n-Ph, -(CH2)n-naphthyl, etc.; Y = H, alkyl, alkenyl, -(CH2)n-cycloalkyl, etc.; Z = CH or N; R1 = (un)substituted -(CH2)n-heterocycloalkyl, -(CH2)n-(bridged heterocycloalkyl), or -N(R7)-

heterocycloalkyl, where R7 = H or alkyl; R2 = (un)substituted Ph, naphthyl, or heteroaryl; R3 = independently H, OH, halo, CF3, etc.; n = 0-4; p = 1-2; q = 0-2] or pharmaceutically acceptable salts thereof were prepared as ligands of the human melanocortin receptors, in particular, selective ligands of the human melanocortin-4 receptor (MC-4R). I are useful for the treatment, control, or prevention of diseases and disorders responsive to the modulation of MC-4R, such as obesity, diabetes, nicotine addiction, alcoholism, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Example compound II was prepared by a multi-step synthesis (procedure given). The tested compds. were found to bind to MC-4R with IC50 values of less than 10  $\mu \rm M$ .

L5 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:12259 CAPLUS Full-text

DOCUMENT NUMBER: 148:144652

TITLE: Preparation of substituted piperidines that increase

p53 activity and the uses thereof

INVENTOR(S): Ma, Yao; Lahue, Brian Robert; Shipps, Gerald W.; Wang,

Yaolin; Bogen, Stephane L.; Voss, Matthew Ernst; Nair, Latha G.; Tian, Yuan; Doll, Ronald J.; Guo, Zhuyan; Strickland, Corey O.; Zhang, Rumin; McCoy, Mark A.; Pan, Weidong; Siegel, Elise M.; Gibeau, Craig R.

PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: U.S. Pat. Appl. Publ., 199pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	1 ТИ	4O.			KIN	D	DATE			APPL	ICAT	ION 1	.OV		D.	ATE	
US 2 WO 2			-		A1 A1		2008 2008					 7690. US14				 0070 0070	-
		AE, CH,	AG, CN,	co,	CR,	AT, CU,	AU,	AZ, DE,	BA, DK,	BB, DM,	BG, DO,	BH, DZ,	BR, EC,	BW, EE,	BY, EG,	BZ, ES,	CA, FI,
	GB, GD, G KM, KN, K MG, MK, M PT, RO, R TR, TT, T		MN, RS,	MW, RU,	MX, SC,	MY, SD,	MZ, SE,	NA, SG,	NG, SK,	NI, SL,	NO, SM,	NZ, SV,	OM,	PG,	PH,	PL,	
<u>:</u>	RW:	AT, IS, BJ, GH,	BE, IT, CF, GM,	BG, LT, CG, KE,	CH, LU, CI, LS,	CY, LV, CM, MW,	CZ, MC, GA, MZ,	DE, MT, GN, NA,	DK, NL, GQ,	EE, PL, GW,	ES, PT, ML,	FI, RO, MR,	FR, SE, NE,	SI, SN,	SK, TD,	TR, TG,	BF, BW,
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PRIORITY APPLN. INFO.:

US 2006-817753P P 20060630

OTHER SOURCE(S): MARPAT 148:144652

GΙ

AB Title compds. I [R1 = (un)substituted heterocyclyl, heterocyclenyl, heteroaryl, etc.; A = O, S, CO, (un)substituted CH2, etc.; m = 0-2; R2 = (un)substituted aryl, heteroaryl, cyclyl, etc.; R3 = COX, SO2X, OX, etc., where in X = (un)substituted aryl, heteroaryl, heterocyclyl, etc.; R4 and R4a

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

independently = H, alkyl, alkenyl, etc.; or R4 and R1 together form (un) substituted heterocyclyl or heterocyclenyl; or R4 and R4a or R5 and R5a or R6 and R6a or R7 and R7a together with the atom they are attached to form an (un) substituted spirocycle; R5, R5a, R7 or R7a independently = H, alkyl, alkoxy, etc.; R6 and R6a independently = H, alkyl, trihaloalkyl, etc.; R6 and R7, R6 and R6a or R5 and R7 together with the carbon each is attached to form cycloalkyl, cyclenyl, heterocyclyl, or heterocyclenyl], and their pharmaceutically acceptable salts, are prepared and disclosed as modulators of p53 activity. Thus, e.g., II was prepared by amidation of III (preparation given) with N-(2-piperazinylphenyl)-2-methoxyethanamide (preparation given)followed by demethylation. Compds. of the present application exhibit FP IC50, FP Ki, and Cell Viability CO50 values of less than about 50.0  $\mu M$ . Select HDM2 inhibitory activities are given. In its many embodiments, the present invention discloses I as inhibitors of HDM2 protein, methods for preparing such compds., pharmaceutical compns. including one or more such compds., methods of treatment, prevention, inhibition, of one or more diseases associated with the HDM2 protein or P53 using such compds. or pharmaceutical compns.

L5 ANSWER 3 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1175911 CAPLUS Full-text

DOCUMENT NUMBER: 147:450505

TITLE: Dispersion adjuvant for metal nanoparticles and metal

 $\ensuremath{\mathsf{nanoink}}$  comprising the dispersed metal nanoparticles

INVENTOR(S): Kim, Sang Ho; Lee, Jong Taik; Kim, Min Seo; Heo, Soo

Yeon

PATENT ASSIGNEE(S): Lg Chem, Ltd., S. Korea SOURCE: U.S. Pat. Appl. Publ., 7pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070244220	A1	20071018	US 2007-783741	20070411
KR 2007101775	A	20071017	KR 2007-34671	20070409
PRIORITY APPLN. INFO.:			KR 2006-33207 A	20060412
OTHER SOURCE(S):	MARPAT	147:450505		

AB A dispersion adjuvant for metal nanoparticles is an amide derivative The dispersion adjuvant helps metal nanoparticles to be dispersed in a solvent in the presence of a dispersant, inhibits metal particles from agglomerating among themselves, and increases the content of metal nanoparticles in nonaq. solvent. Addnl., interconnection lines formed by using the nanoink have an increased content of metal per unit area, and provide improved conductivity

L5 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:999518 CAPLUS Full-text

DOCUMENT NUMBER: 147:344112

TITLE: Preparation of aryl sulfonyl heterocycles as

bradykinin receptor modulators

INVENTOR(S): Peterson, John M.; Li, Guiving; Ihle, David C.;

Hodgetts, Kevin J.; Guo, Qin; Ge, Ping; Hutchison,

Alan J.

PATENT ASSIGNEE(S): Neurogen Corporation, USA SOURCE: PCT Int. Appl., 113pp.

CODEN: PIXXD2

DOCUMENT TYPE: Pat.ent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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	PAI	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
	WO	2007	 1010	07		A2	_	2007	0907	1	==== WO 2	 007-1	 US62	 406		2	0070.	220
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
			KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
			MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
			RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
			TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	·	·	·	·	·	·
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
								MC,										
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	TJ,	TM	·	·	·	·	·	·	·	·	·	·
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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Title compds. I [n = 0 or 1, if n = 0, then m = 1 and q = 0 or 1, if n = 1,AR then either (i) m = 1 and q = 1 or or 2 or (ii) q = 1 and m = 1 or 2; X = 0, S, SO, SO2, or NR3; Y = -OCH2-, -(CH2)2-, -CH=CH-, etc.; R1 = 0-5 substituents chosen from halo, OH, CN, alkyl, etc.; R2 = oxo, OH, and alkyl; R3 = H, alkyl or alkanoyl; R4 = H, alkyl, alkenyl, etc.; R5 = alkyl, alkenyl, alkyl ether, etc.], and their pharmaceutically acceptable salts, are prepared and disclosed as capable of modulating bradykinin receptors. Thus, e.g., II was prepared by deprotection of N-BOC-morpholine-3-carboxylic acid, sulfonylation with 2,6dimethyl-4-methoxyphenylsulfonyl chloride, reduction, O-alkylation with tertbutylbromoaceate, hydrolysis, and amidation with 4-(3-(dimethylamino)propyl)piperazine. Bioassays are described for evaluating activity of I (no data). I may be used to modulate bradykinin receptor activity in vivo or in vitro, and are particularly useful in the treatment of conditions responsive to B1 modulation in humans, domesticated companion animals and livestock animals, including inflammation and pain. Pharmaceutical compns. and methods for using them to treat such disorders are provided, as are methods for using such ligands for receptor localization studies and various in vitro assays.

ANSWER 5 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:464460 CAPLUS Full-text DOCUMENT NUMBER: 146:462284

Preparation of pyrazolo[1,5-a]pyrimidine-3-TITLE:

carboxamides as casein kinase II (CK2) modulators for

the treatment of cancer

Rice, Kenneth D.; Bussenius, Joerg; Costanzo, Simona; INVENTOR(S):

Kennedy, Abigail R.; Kim, Angie Inyoung; Manalo,

Jean-Claire Limun; Peto, Csaba J.

Exelixis, Inc., USA PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 99pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

	PA]	CENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION 1	. O <i>l</i>			ATE	
		2007				A2		2007		•	 WO 2	006-	JS41	506			0061	
,	WO	2007	0480	66		А3		2007	0628									
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
			KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
			MN,	MW,	MX,	MY,	ΜZ,	NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,
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			TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW						
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
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			CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑP,	EA,	EP,	OA						
	AU 2006304875					A1		2007	0426		AU 2	006-	3048	75		2	0061	023
PRIOR	RIORITY APPLN. INFO.:										US 2	005-	7293	48P		P 2	0051	021
										,	WO 2	006-	JS41	506	,	W 2	0061	023

OTHER SOURCE(S): MARPAT 146:462284

$$R^{1}$$
 $R^{2}$ 
 $R^{1}$ 
 $R^{7}$ 
 $R^{7$ 

AB Title compound I [wherein R1 = OH, alkoxy or arylalkylamino; R2 = alkyl, (un)substituted (hetero)aryl or heterocycloalkyl; R6 = H or alkyl; R7 = H, alkylamino or dialkylamino; Z = aryloxy, cycloalkyloxy, amino, etc., with limitations] or pharmaceutically acceptable salts thereof were prepared as casein kinase II (CK2) modulators. For instance, cyclization of Et 5-amino-1H-pyrazole-4-carboxylate with Et 3-oxo-3-phenylpropanoate followed by ester hydrolysis of the resultant pyrazolo[1,5-a]pyrimidine-3- carboxylate and subsequent coupling with 1-Phenylpiperazine led to pyrazolopyrimidine carboxamide II. I showed CK2 inhibitory activity with IC50 values of less than 5000 nM. The invented compds. and their pharmaceutical compns. are useful for the treatment of diseases that involve CK2, such as cancer.

L5 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:439604 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 146:421851

TITLE: Preparation of piperidine derivatives as antagonists of CCR1 receptor

INVENTOR(S): Zhang, Penglie; Pennell, Andrew M. K.; Chen, Wei;

Greenman, Kevin Lloyd; Li, Lianfa; Sullivan, Edward J.

PATENT ASSIGNEE(S): Chemocentryx, Inc., USA SOURCE: PCT Int. Appl., 86pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA	ATENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
W(	2007 2	0448	 04		A2	_	2007	0419	;	——— WO 2	 006-1	 US39	 713		2	 0061	011
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
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		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
US	3 2007	0088	036		A1		2007	0419	,	US 2	006-	5469.	38		2	0061	011
US	S 2007	0093	467		A1		2007	0426		US 2	006-	5802	02		2	0061	011
PRIORI:	TY APP	LN.	INFO	.:						US 2	005-	7259	80P	]	P 2	0051	011
OTHER S	SOURCE	(S):			MAR:	PAT	146:	4218.	51								
GI																	

Title compds. I [R1 = cycloalkyl, (un) substituted alkyl, haloalkyl, etc.; any two R1 attached to the same or different carbon atoms may join together to form a 3- to 7-membered ring; m = 0-4; R2-6 independently = H, halo, CN, NO2, etc.; A = H, aryl, heteroaryl, etc.; B = (un) substituted aryl or heteroaryl; L1 = (un) substituted alkylene or heteroalkylene], and their pharmaceutically acceptable salts, are prepared and disclosed as antagonists of CCR1 receptor. Thus, e.g., II was prepared via heterocyclization of 4-chlorobenzyl cyanide with bis(2-chloroethyl) amine followed by acylation with (4-chloro-5-methyl-3-trifluoromethylpyrazol-1- yl) acetic acid. Select compds. were evaluated for

their inhibitory activity in CCR1 ligand binding assay or chemotaxis assay, e.g., II demonstrated IC50 value of  $< 1000 \, \text{nM}$ .

L5 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:409620 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 146:421983

TITLE: Preparation of 1H-benzimidazole-4-carboxamides as

poly(ADP-ribose)polymerase (PARP) inhibitors for the treatment of inflammation, sepsis and septic shock

INVENTOR(S): Penning, Thomas D.; Thomas, Sheela A.; Zhu, Gui-Dong;

Gandhi, Virajkumar B.; Gong, Jianchun; Giranda,

Vincent L.

PATENT ASSIGNEE(S): Abbott Laboratories, USA SOURCE: PCT Int. Appl., 85pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
WO	WO 2007041357			A1 20070412			WO 2006-US38169					20060928					
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
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		RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV	, SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML	, MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
CA	2623	822			A1		2007	0412		CA :	2006-	2623	822		2	0060	928
US	US 20070179136				A1		2007	0802		US :	2006-	5369	94		2	0060	929
PRIORIT	PRIORITY APPLN. INFO.:									US :	2005-	7216	83P		P 2	0050	929
										WO :	2006-	US38	169		W 2	0060	928

OTHER SOURCE(S): MARPAT 146:421983

GΙ

$$R^{1}$$
 $R^{2}$ 
 $R^{3}$ 
 $R^{3}$ 
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 $R^{3}$ 
 $R^{3}$ 
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 $R^{4$ 

AΒ Title compds. I [wherein R1, R2, R3 = H, alkenyl, alkoxy, etc.; R4 = H, halo or (halo)alkyl; m = 4; Z = bond or alkylenyl; A = (un)substituted nonarom. Nheterocyclyl, with limitations] were prepared as poly(ADP-ribose)polymerase (PARP) inhibitors. For instance, CDI-mediated amidation of tert-Bu 4-(4carboxyphenyl)piperidine-1-carboxylate with 2,3-diaminobenzamide dihydrochloride followed by cyclocondensation/deprotection in refluxing acetic acid gave benzimidazolecarboxamide II. The invented compds. were found to be potent PARP inhibitors with Ki values in the range of nanomolar. They could penetrate cell membranes and inhibit PARP in intact cells, and potentiate the antitumor activity of cisplatin. Therefore, I are useful for treating a disease or a disorder associated with PARP, such as inflammation, sepsis and septic shock.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:150683 CAPLUS Full-text

146:206459 DOCUMENT NUMBER:

Processes for preparation of pyrrolidine-containing TITLE:

boronic acids and their derivatives by convergent

Campbell, David Alan; Winn, David T. INVENTOR(S):

Phenomix Corporation, USA PATENT ASSIGNEE(S): PCT Int. Appl., 52pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND		DATE		APPLICATION NO.					DATE				
WO	WO 2007016356			A1 20070208		WO 2006-US29451						20060727					
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
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		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
AU 2006275697				A1 20070208				AU 2006-275697						20060727			
CA 2617310				A1 20070208				CA 2006-2617310						20060727			
EP	1919	485			A1		2008	0514		EP 2	006-	7888	16		2	0060	727
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,
		BA,	HR,	MK,	RS												
KR 2008036125				A 20080424			KR 2008-705010						20080229				
ORITY APPLN. INFO.:							US 2005-704380P						P 20050801				
				WO 2006-US29451 W 200607							727						
HER SOURCE(S):				CASREACT 146:206459; MARPAT 146:206459													

GΙ

AΒ Title pyrrolidine-containing boronic acids [I; R = N-protecting group, e.g., benzyl, Cbz, Boc, Fmoc, Alloc, Teoc; R1 = (un)substituted hydrocarbon group optionally containing hetero atoms, e.g., 3-pyrrolidinyl; R2, R3 = independently or together a group that can be hydrolyzed to OH], useful for treating patients suffering from diabetes and related diseases (no data), are prepared by coupling RR1NCH2COA (II; same R, R1; A = OH or a group which may be displaced by an amine, e.g., imidazolyl, halo, azide, carbonate ester) with boropyrrolidines (III; same R2, R3). Further, intermediates II are prepared by sequential alkylation of R1NH2 (same R1) with LCH2CO2R4 [L = leaving group, preferably Cl, Br, iodo, mesylate, triflate; R4 = carboxyl-protecting group, preferably Me, Et, CMe3, allyl, benzyl] in presence of a base, preferably Na2CO3, K2CO3 or Cs2CO3, to give R1NHCH2CO2R4, protection of the secondary amine to give RR1NCH2CO2R4, and conversion of the latter to RR1NCH2COA. In the context of synthesizing heterocyclic boronic acid compds., a convergent synthetic methodol. is particularly efficient for preparing boropyrrolidines, e.g., IV (preparation given), and derivs. of boropyrrolidines.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:1157964 CAPLUS Full-text

DOCUMENT NUMBER: 145:471409

TITLE: Preparation of five- and six-membered cyclic amines as

coagulation factor Xa inhibitors

INVENTOR(S): Groebke-Zbinden, Katrin; Haap, Wolfgang; Hilpert,

Hans; Panday, Narendra; Ricklin, Fabienne; Wirz, Beat

PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 169pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006114401	A2	20061102	WO 2006-EP61776	20060424
WO 2006114401	А.3	20070412		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

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             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
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             KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
                                20061102
                                            US 2006-403973
     US 20060247238
                          Α1
                                                                    20060413
     AU 2006239329
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                                             AU 2006-239329
                          Α1
                                                                    20060424
     CA 2604603
                                20061102
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     EP 1877404
                          Α2
                                20080116
                                             EP 2006-777206
                                                                    20060424
            AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
                                20071123
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     NO 2007005158
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                                                                    20071023
     KR 2007114836
                          Α
                                20071204
                                            KR 2007-724610
                                                                    20071025
     IN 2007CN04815
                                20080321
                                             IN 2007-CN4815
                                                                    20071029
                          Α
     CN 101208334
                                20080625
                                             CN 2006-80023061
                                                                    20071226
PRIORITY APPLN. INFO.:
                                             EP 2005-103452
                                                                 A 20050427
                                             WO 2006-EP61776
                                                                 W
                                                                    20060424
                        MARPAT 145:471409
OTHER SOURCE(S):
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$$R^{1}$$
,  $R^{1}$ ,  $R$ 

GΙ

The invention is concerned with novel cyclic amines (shown as I; variables defined below; e.g. (2S,4R)-4-[[(5-chlorothien-2-yl)carbonyl]amino]-1-[[[2-fluoro-4-(2-oxo-2H-pyridin-1-yl)phenyl]carbamoyl]methyl]pyrrolidine-2-carboxylic acid Me ester (shown as II)) as well as physiol. acceptable salts thereof. These compds. inhibit the coagulation factor Xa and can be used as medicaments (e.g. for thrombotic disorders). For I: X1 is -CHR2C(O)NH-, -C(O)CH2NH-, -C(O)NH- or C(O)C(O)NH-; X2 is (un)substituted phenylene, heteroarylene or heterocyclylene; X3 is H or (un)substituted Ph, heteroaryl or heterocyclyl; R2 is hydrogen or C1-6 alkyl; Y1 is -C(O)NH-, -C(O)NHCH2- or -NHC(O)-; Y2 is (un)substituted phenylene, heteroarylene or heterocyclylene; Y3 is H, or (un)substituted Ph, heteroaryl or heterocyclyl; R1' is halogen, carboxy, C1-6-alkoxycarbonyl, hydroxy C1-6-alkyl-NHC(O)-, et al. R1' is H; or R1'

and R1'' form, together with the same C atom to which they are attached, -C(0)-, -C(:CH2)-, C3-7-cycloalkyl or heterocyclyl, one or two C atoms of said heterocyclyl being optionally replaced with a carbonyl group; R2 is H or C1-6alkyl; n = 1-2; addnl. details including provisos are given in the claims. Methods of preparation are claimed and prepns. and/or characterization data for .apprx.70 examples of I are included. For example, II was prepared in 4 steps starting with coupling of trans-4-(Bocamino)-L-proline Me ester hydrochloride with 5-chlorothiophene-2-carboxylic acid to give (2S,4R)-4-[[(5chlorothien-2-yl)carbonyl]amino]pyrrolidine-1,2- dicarboxylic acid 1-tert-Bu ester 2-Me ester, which was deprotected and reacted with 2-bromo-N-[2-fluoro-4-(2-oxo-2H-pyridin-1-yl)phenyl]acetamide (prepared from 1-(4-amino-3fluorophenyl)-1H-pyridin-2-one and bromoacetyl bromide). The use of lipase from Candida (e.g. Candida antarctica from B) or Pseudomonas fluorescens or a protease from Aspergillus sojae for enzymic resolution of N-Boc-3-cyano-4hydroxypyrrolidines and N-Boc-3-acyloxy-4-cyanopyrrolidines is also claimed. Ki values for factor Xa are tabulated for 5 examples of I.

L5 ANSWER 10 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:815924 CAPLUS Full-text

DOCUMENT NUMBER: 145:249186

TITLE: Preparation of pyrrolopyridines and analogs as

inhibitors of tryptase

INVENTOR(S): Hirschbein, Bernard; Lee, Chang Sun; Litvak, Joane;

Liu, Weili; Sendzik, Martin; Shelton, Emma J.;

Spencer, Jeffrey R.; Sperandio, David; Tai, Vincent

W-F.; Winslow-Lohman, Julia; Yee, Robert

PATENT ASSIGNEE(S): Axys Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 222pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION I	.O		D.	ATE	
WO	2006				A2		2006		1	WO 2	006-	JS46	30		2	0060	209
WO	2006	0866	09		А3		2007	0201									
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	MZ, NA, NG, SG, SK, SL,				SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
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		GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
PRIORIT	ORITY APPLN. INFO.:								1	US 2	005-	6518	70P	:	P 2	0050	210
OTHER S	OURCE	MAR:	PAT	145:	2491	86											

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [A = (un)substituted benzo, pyridino, pyrimidino, etc.; D = N or CR6 wherein R6 = H, alkyl, halo, etc.; R1 = H, alkylsulfonyl, arylsulfonyl, etc.; R2 = H, alkyl, alkylsulfonyl; R3 = H, alkyl, OH, CN, etc.; R4a and R4b independently = H, (un)substituted alkyl, acyl, etc.; L = functionalized bridging ligand; Z = (un)substituted heterocycle], and their pharmaceutically acceptable salts, are prepared and disclosed as tryptase inhibitors. Thus, e.g., II was prepared by coupling of [5'-chloro-2'-hydroxy-3'-(1H-pyrrolo[2,3-c]pyridin-2-yl)-biphenyl-4- yl]acetic acid (preparation given) with 4-phenylmethylpiperidin-4-ol. Assays for determining activity against human tryptase are described (no data). Further disclosed are pharmaceutical composition comprising these compds. and method of treating asthma, allergic rhinitis, and/or Chronic Obstructive Pulmonary Disease utilizing these compds.

L5 ANSWER 11 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:408956 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 144:450718

TITLE: Ortho-condensed pyridine and pyrimidine derivatives

(e. g. purines) as protein kinases inhibitors and their preparation, pharmaceutical compositions and use for treatment of protein kinase mediated diseases such

as proliferative diseases

INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon;

Verdonk, Marinus Leendert; Woodhead, Steven John; Wyatt, Paul Graham; Sore, Hannah Fiona; Caldwell, John; Collins, Ian; Da Fonseca, Tatiana Faria; Donald,

Alastair

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of

Cancer ResearchRoyal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 174 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

P.	ATENT		KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE			
M	 D 2006	0460	 23		A1	_	2006	0504	,	WO 2	005-	 GB41	 15		2	0051	025
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	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	$\mathrm{ML}_{m{\prime}}$	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	$^{\mathrm{TM}}$										
E.	P 1812	003			A1		2007	0801		EP 2	005-	7968	42		2	0051	025
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		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
J:	JP 2008517983						2008	0529	1	JP 2	007-	5384	99		2	0051	025
PRIORI'	TY APP	.:											A 2	0041	025		
								US 2						0041	025		
										US 2						0050	_
									,	WO 2	005-0	GB41	15	Ţ	W 2	0051	025

AΒ The invention provides a compound for use as a protein kinase B inhibitor of prophylaxis or treatment of protein kinase mediated diseases, the compound being a compound of the formula I or salts, solvates, tautomers or N-oxides thereof. Compds. of formula I where in T is N or CR5; J1-J2 is N=CR6, R7C=N, R8NCO, (R8)2CO, N=N, or R7C=CR6; A is (un)substituted C1-7 saturated hydrocarbon linker having maximum 5 atoms between R1 and NR2R3, and maximum 4 atoms between E and NR2R2, where one of the carbon atoms may be optionally replaced by O or N; E is mono- or bicyclic carbocyclic or heterocyclic group, or an acyclic group X-G; X is CH2, O, S, NH; G is C1-4 alkylene where one of the carbon atoms may be optionally replaced by O, S or NH; R1 is is H, or (hetero)aryl; R2 and R3 are independently H, (un)substituted C1-4 heterocarbyl, or (un)substituted C1-4 acyl; or NR3R3 together and an atom from the linker A may form a saturated 4- to 7-membered monocyclic heterocyclic group, or a cyano group; R4 is H, halo, (un)substituted C1-6 saturated hydrocarbyl, CN, CONH2, CONHR9, CF3, NH2, NHCOR9, or NHCONHR9; R9 is (un) substituted Ph, or (un) substituted Bn; or their pharmaceutically acceptable salts, solvates, tautomers, or N-oxides thereof. Example compound II was prepared by condensation of 4-[9-(tetrahydropyran-2-yl)-9H- purine-6yl]benzaldehyde with tert-butanesulfinamide; the resulting 2-methylpropane-2sulfinic acid 4-[9-(tetrahydropyran-2-yl)-9H-purine-6- yl]benzylideneamide reacted with benzylmagnesium chloride to give 2-methylpropane-2-sulfinic acid (2-phenyl-[4-[9-(tetrahydropyran-2-yl)-9H- purine-6-yl]phenyl]ethyl)amide, which underwent hydrolysis to give example compound II. All the invention compds. were tested for their protein kinase inhibitory activity. From the assay it was determined that compound II and some of the other example compds. exhibited IC50 values of less than 10  $\mu M$  against both protein kinase A and B. The invention compds. were also evaluated for their antiproliferative activity. Preferred compds. of the invention were found to have IC50 values of less than 30  $\mu M$  in this assay...

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:365172 CAPLUS Full-text

DOCUMENT NUMBER: 144:382018

TITLE: Methods for the treatment of substance abuse and

addiction

INVENTOR(S): Bristow, Linda; Fong, Tung M.; Morse, Andrew C.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
		2006						2006			WO 2	005-	US35	449		2	0050	930
	WO	2006	0417	69		A3		2007	0614									
		W:	ΑE,	ΑG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,
			NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,
			SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,
		YU, ZA, ZM			ZM,	ZW												
		RW: AT, BE, BG			BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
			GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM,	AP,	EA,	EP,	OA						
	ΕP	1804	798			A2		2007	0711		EP 2	005-	8121	68		2	0050	930
		R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
			IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,
	BA, HR, MK					YU												
	US 20080021067							2008	0124		US 2	007-	6620	18		2	0070	305
PRIOR	ORITY APPLN. INFO.:										US 2	004-	6160	64P		P 2	0041	005
											WO 2	005-	US35	449	1	W 2	0050	930
	_ ~								0000									

OTHER SOURCE(S): MARPAT 144:382018

AB The present invention relates to methods of treating and preventing substance addiction and substance abuse, including nicotine addiction and nicotine addiction-related disorders in a subject comprising administering a melanocortin 4 receptor agonist to said subject. The present invention further relates to methods of treating or preventing substance addiction and substance addiction-related disorders in a subject comprising administering a melanocortin 4 receptor agonist to said subject. The present invention further provides for pharmaceutical compns. and medicaments useful in carrying out these methods.

L5 ANSWER 13 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:236714 CAPLUS Full-text

DOCUMENT NUMBER: 144:287793

TITLE: Inhibition of voluntary ethanol consumption with

non-peptidyl melanocortin 4-receptor agonists

INVENTOR(S): Bristow, Linda; Fong, Tung M.; Morse, Andrew C.; Ren,

Kunkun

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
WO 2006	WO 2006028631 W: AE, AG, A				_	2006	0316		WO 2	005-	 US28	128		2	0050	809
₩:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AΖ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE, GH, GM,			HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚM,	KP,	KR,	KΖ,

LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM 20070509 EP 2005-812403 EP 1781283 Α2 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU US 20080085885 20080410 US 2007-660117 20070212 Δ1 PRIORITY APPLN. INFO.: US 2004-601486P P 20040813 WO 2005-US28128 W 20050809

OTHER SOURCE(S): MARPAT 144:287793

AB The present invention relates to methods of inhibiting or reducing voluntary alc. consumption in a subject comprising administering a non-peptidyl melanocortin 4 receptor agonist to said subject. The present invention further relates to methods of treating or preventing alcoholism, alc. abuse, and alc. related disorders in a subject comprising administering a non-peptidyl melanocortin 4 receptor agonist to said subject. The present invention further provides for pharmaceutical compns. and medicaments useful in carrying out these methods.

L5 ANSWER 14 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:167664 CAPLUS Full-text

DOCUMENT NUMBER: 144:247201

TITLE: Method of stimulating the motility of the

gastrointestinal system using growth hormone

secretagogues, and therapeutic use

INVENTOR(S): Polvino, Wiliam J.

PATENT ASSIGNEE(S): Sapphire Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 122 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PAT	CENT	NO.			KIN	)	DATE			APPL	ICAT	ION I	NO.		D	ATE	
WO	2006	0209	30		A2	_	2006	0223		WO 2	005-	US28	851		2	0050	812
WO	2006	0209	30		A3		2006	1123									
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
ΑU	AU 2005272598			A1		2006	0223		AU 2	005-	2725	98		2	0050	812	
CA	A 2576238			A1		2006	0223		CA 2	005-	2576.	238		2	0050	812	

EP	17890	067			A2	2	2007	0530		ΕP	200	5-	78663	31		2	0050	312
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	:, E	S,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PΙ	, P	Τ,	RO,	SE,	SI,	SK,	TR,	AL,
		ΒA,	HR,	MK,	ΥU													
US	20070	0191	283		A1	4	2007	0816	1	US	200	5-2	20363	39		2	0050	312
CN	1010	76349	9		Α	4	2007	1121	(	CN	200	5-8	30032	2193		2	0050	312
JP	2008509930				Τ	2	2008	0403		JΡ	200	7-5	52585	53		2	0050	312
IN	20071	0 0 MM	186		Α	4	2007	0720		ΙN	200	7-1	4N186	5		2	0070	206
МX	20070	0147	7		Α	4	2007	1010	]	MX	200	7-1	1477			2	0070	206
KR	20070	06459	93		Α	2	2007	0621		KR	200	7-7	70508	33		2	0070	302
PRIORIT?	Y APP	LN.	INFO	.:					1	US	200	4 - 6	50095	59P	]	2	0040	312
									1	WO	200	5-t	JS288	351	Ī	W 2	0050	312

OTHER SOURCE(S): MARPAT 144:247201

AB The invention discloses a method for stimulating the motility of the gastrointestinal system in a subject in need thereof, wherein the subject suffers from maladies (i.e., disorders or diseases) of the gastrointestinal system. The method comprises administering to a subject in need thereof a therapeutically effective amount of a growth hormone secretagogue compound or a pharmaceutically acceptable salt, hydrate or solvate thereof. The growth hormone secretagogue can be co-administered with a laxative, a H2 receptor antagonist, a serotonin 5-HT4 agonist, an antacid, an opioid antagonist, a proton pump inhibitor, a motilin receptor agonist, dopamine antagonist, a cholinergic agonist, a cholinesterase inhibitor, somatostatin, octreotide, or any combination thereof.

L5 ANSWER 15 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1272696 CAPLUS Full-text

DOCUMENT NUMBER: 144:36440

TITLE: Method for preparation and application of bimolecular

derivatives of Huperzine-B and dual functional groups-containing derivatives of Huperzine-B

INVENTOR(S): Bai, Donglu; Feng, Song; He, Xuchang; Tang, Xican;

Wang, Rui

PATENT ASSIGNEE(S): Shanghai Institute of Materia Medica, Chinese Academy

of Sciences, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 20 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1616431	A	20050518	CN 2003-10108598	20031113
PRIORITY APPLN. INFO.:			CN 2003-10108598	20031113
OTHER SOURCE(S):	CASREA	CT 144:36440	; MARPAT 144:36440	

The invention relates to bimol. derivs. of Huperzine-B and dual functional groups-containing derivs. of Huperzine-B, their preparation methods and applications. The bimol. derivs. and dual functional groups-containing derivs. I or II (R1 = CO, CH2; R2, R3 = H, Me, Et, Pr, cyclopropyl, Bn, substituted phenyl; Ar = alkoxy, halo, nitro, substituted Ph, naphthyl, pyridinyl, taurine; X,Y = C, N, O; m = 1,2,3; n = 0, 1, 2, 3; p = 1 to 12 integers) were prepared using Huperzine-B as starting material, and had a higher inhibiting activity on acetylcholine esterase than that of Huperzine-B as determined by the in vitro bioactivity test. Some derivs. have an inhibiting activity several hundreds times, or even several thousands times higher than that of the parent compound It is hopeful to obtain a medicine having high therapeutic index and little adverse effect for the treatment of presentle dementia by further optimization and selection of these derivs.

L5 ANSWER 16 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1220275 CAPLUS Full-text

DOCUMENT NUMBER: 143:460031

TITLE: Preparation of heterocycle-containing phenol ethers,

thioethers and related derivatives as histamine H3

ligands

INVENTOR(S): Bernardelli, Patrick; Cronin, Andrew Michael; Denis,

Alexis; Denton, Stephen Martin; Jacobelli, Henry; Kemp, Mark Ian; Lorthiois, Edwige; Rousseau, Fiona;

Serradeil-Civit, Delphine; Vergne, Fabrice

PATENT ASSIGNEE(S): Warner-Lambert Company LLC, USA

SOURCE: PCT Int. Appl., 216 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005108384	A1	20051117	WO 2005-IB1114	20050419
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             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
             SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
             ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
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                                20051109
                                           EP 2004-291187
     EP 1593679
                          Α1
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
     AU 2005240846
                         Α1
                                20051117
                                            AU 2005-240846
                                                                   20050419
     CA 2565852
                          Α1
                                20051117
                                            CA 2005-2565852
                                                                    20050419
                                            EP 2005-718521
     EP 1747210
                          Α1
                                20070131
                                                                    20050419
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             HR, LV, MK, YU
                                            CN 2005-80014662
                                20070418
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                          Α
     BR 2005010664
                                20071204
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                          Α
                                                                    20050419
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                          Τ
                                20071213
                                            JP 2007-512541
                                                                   20050419
    MX 2006PA12819
                                20070126
                                            MX 2006-PA12819
                                                                   20061106
                          Α
                                            KR 2006-723284
     KR 843848
                          В1
                                20080703
                                                                   20061106
     NO 2006005635
                          Α
                                20070201
                                            NO 2006-5635
                                                                    20061206
                                            EP 2004-291187
PRIORITY APPLN. INFO.:
                                                                A 20040507
                                            GB 2005-4564
                                                                A 20050304
                                                               W 20050419
                                            WO 2005-IB1114
OTHER SOURCE(S):
                        MARPAT 143:460031
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GΙ

AΒ Title compds. [I; m, p = 0-3; m+p  $\leq 4$ ; X = cyano, CH2OH, alkoxymethyl, CO2H, alkoxycarbonyl, aminomethyl, aminocarbonyl, CH2Ohet (het = (substituted) monoor bicyclic heteroaryl), CH2het, het; Y = CH2, CH(OH), CO, N (substituted by H, at al.); ZR is in the meta or para position of the Ph group; Z = 0, S, S(0), S(0)2; R = (cyclo) aminoalkyl; addnl. details are given in the claims], were prepared Thus, reaction of 3-[4-(dimethylamino)methyltetrahydro-2Hpyran-4-yl]phenol (preparation given) with 1-(3-chloropropyl)pyrrolidine (preparation given) gave 20% title compound (II). In a cell-based H3 functional assay measuring cAMP through  $\beta$ -lactamase reporter gene activity, I showed Ki <5  $\mu\text{M}$ ; values are tabulated for 26 examples of I. I are H3 ligands useful in treating e.g. inflammatory, allergic and respiratory diseases. THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 6 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1123812 CAPLUS Full-text

DOCUMENT NUMBER: 143:379815

TITLE: Method of reducing C-reactive protein using growth

hormone secretagogues

INVENTOR(S): Polvino, William J.; Carpi, David B.; Smith, Roy G.

PATENT ASSIGNEE(S): Rejuvenon Corporation, USA SOURCE: PCT Int. Appl., 135 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.						DATE						МО.		D	ATE		
WO	2005	0972	61		A1		2005	1020	1						2	0050	330	
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,	
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	
		SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,			
	EE, ES, E				FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,	
	EE, ES, E RO, SE, S				SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	${ m ML}$ ,	
		MR,	•		TD,													
CA	2565	324			A1		2005	1020	(	CA 2	005-	2565.	324		2	0050	330	
US	2005						2005	1124	1	US 2	005-	9433	9		2	0050	330	
EP	1735	055			A1		2006	1227		EP 2	005-	7331	03		2	0050	330	
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
		IS,	ΙΤ,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR			
JP	2007	5317	69		T		2007	1108	ı	JP 2	007-	5065	67		2	0050	330	
KR	2007	0101	51		Α		2007	0122		KR 2	006-	7214	82		2	0061	017	
RIORIT	RITY APPLN. INFO.:								1	US 2	004-	5574	66P		P 2	0040	330	
									1	WO 2	005-1	US10	927	1	W 2	0050	330	

OTHER SOURCE(S): MARPAT 143:379815

The invention discloses a method for reducing C-reactive protein in a subject in need of treatment thereof, wherein the subject is at risk of having or the subject has already had a vascular event or suffering from an inflammatory disease or disorder. In one embodiment, the vascular event is a cardiovascular event (e.g., myocardial infarction). In another embodiment, the vascular event is a cerebrovascular event (e.g., stroke, transient ischemic attacks). In yet another embodiment the vascular event is a peripheral vascular event (e.g., intermittent claudication). The method comprises administering a therapeutically effective amount of at least one growth hormone secretagogue compound or a pharmaceutically acceptable salt, hydrate or solvate thereof. The growth hormone secretagogue can be coadministered with a second growth hormone secretagogue, HMG CoA reductase inhibitor, an ACAT inhibitor, a CETP inhibitor, an anti-inflammatory agent, an ACE inhibitor, a Beta blocker, a cholesterol absorption inhibitor, a nicotonic acid, a fabric acid derivative, a bile acid sequestering agent or a combination thereof.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 18 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:698366 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 143:166724

TITLE: Prodrugs of potassium channel inhibitors, and

preparation thereof

INVENTOR(S): Gross, Michael F.; Lloyd, John

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S.

Ser. No. 417,355.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT	NO.		KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
US 2005					2005						-				
US 2004					2004			US 2	003-	4173	55		2	0030	416
US 7005					2006						_				
US 2006															
WO 2006	073967		A1		2006	0713		WO 2	005-	US47	183		2	0051	227
₩:	AE, AG	, AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN, CO	, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE, GH	, GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
	KZ, LC	, LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
	MZ, NA	, NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
	SG, SK	, SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,
	VN, YU	, ZA,	ZM,	ZW											
RW:	AT, BE	, BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
	IS, IT	, LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
	CF, CG	, CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
	GM, KE	, LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
	KG, KZ	, MD,	RU,	ŢJ,	TM	·	·	·				·	·		·
EP 1841						1010		EP 2	005-	8556	97		2	0051	227
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	IS, IT	. LI.	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	,
PRIORITY APP	LN. INF	).:	·	Í	ŕ	·	·	US 2	002-	3742	79P	· ·	P 2	0020	419
								US 2	003-	4173	55		A2 2	0030	416
								US 2							
								WO 2						0051	
OTHER SOURCE GI	(S):		CAS	REAC	T 14	3:16							2		

AB The invention discloses compds. useful as prodrugs of potassium channel inhibitor compds., in particular as prodrugs of Kv1.5 channel inhibitors. Preparation of compds. of the invention, e.g. I, is described.

L5 ANSWER 19 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470969 CAPLUS Full-text

DOCUMENT NUMBER: 143:26636

TITLE: Preparation of 4-[(Arylmethyl)aminomethyl]piperidines

as inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S): Bosch, Michael; Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr. SOURCE: Fr. Demande, 31 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.					D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
	2862 2862				A1 B1		2005 2006			FR 2	003-	1417	2		2	0031	201
	2005									₩0 2	004-	FB30	66		2	0041	130
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	٧٧ •						DE,										
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			SN,							_							
EP	1694																
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	ΑL,	TR,	ВG,	CZ,	EE,	HU,	PL,	SK,
		HR,	IS,	YU													
JP	2007	5123	84		Τ		2007	0517		JP 2	006-	5419	74		2	0041	130
US	US 20070037819				A1		2007	0215		US 2	006-	4205	05		2	0060	526
PRIORIT	ORITY APPLN. INFO.:									FR 2	003-	1417	2		A 2	0031	201
										WO 2	004-	FR30	66	1	W 2	0041	130
OTHER SO	ER SOURCE(S):					PAT	143:	2663	6								

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Title compds. I [wherein X = (CH2)n; n = 1-2; R1 = CF3; R2 = H, alkyl; R3 = (un)substituted pyrrolyl, 1,2,3-thiadiazolyl, pyrazinyl, etc.; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II was prepared by reacting 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone (preparation given) and 1-methyl-2-pyrrolecarboxaldehyde in THF in the presence of NaBH(OAc)3/AcOH. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells

expressing preferentially p75NTR, with IC50 in the range of  $10-11~\mathrm{M}$  to  $10-6~\mathrm{M}$ at the cellular level.

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 20 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470968 CAPLUS Full-text

DOCUMENT NUMBER: 143:26635

TITLE: Preparation of (4-Phenylpiperazin-1-yl)acylpiperidine derivatives as inhibitors of NGF binding (nerve growth

factor) to p75NTR (p75 neurotrophic) receptor for

treating p75NTR related diseases Dos Santos, Victor; Wagnon, Jean

Sanofi-Synthelabo, Fr. PATENT ASSIGNEE(S): SOURCE: Fr. Demande, 49 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent French LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PA:	PATENT NO.					D	DATE			APPL	ICAT	ION 1	ΝΟ.		D	ATE	
	2862				A1		2005			FR 2	003-	1417.	3		2	0031	201
FR	2862	967			В1		2006	0804									
WO	2005	0542	27		A1		2005	0616		WO 2	004 - 1	FR30	67		2	0041	130
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
	TJ, TM, T				TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW: BW, GH, G			GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LU,	MC,	NL,	PL,	PT,	RO,
		SE,	SI,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	TG												
EP	1699	778			A1		2006	0913		EP 2	004-	8055	91		2	0041	130
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,
		HR,	IS														
JP	2007	5123	85		Τ		2007	0517		JP 2	006-	5419	75		2	0041	130
US	US 20070021609						2007	0125		US 2	006-	4205	08		2	0060	526
PRIORIT:	RITY APPLN. INFO.:									FR 2	003-	1417.	3	2	A 2	0031	201
	MIII IMIIII. IIII O									WO 2	004-	FR30	67	Ī	w 2	0041	130
OTHER SO	OURCE	(S):			MAR	PAT	143:	2663.	5								

GΙ

AB Title compds. I [wherein n = 1-2; R1 = halo, CF3, alkyl, alkoxy, OCF3; R2 = H, halo; R3 = H, OH and derivs., NH2 and derivs., etc.; R4 = (un)substituted Ph; their free bases, or acid addition salts, and their hydrates or solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II•HCl was prepared by reacting 2-chloro-1-[4-hydroxy-4-[3- (trifluoromethyl)phenyl]-1- piperidinyl]-1-ethanone (preparation given) with 1-[3- (trifluoromethyl)phenyl]piperazine in the presence of KI/K2CO3/MeCN. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-11 M to 10-6 M at the cellular level.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 21 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:451356 CAPLUS Full-text

DOCUMENT NUMBER: 143:7981

TITLE: Preparation of amino acid piperidinamides as

melanocortin receptor agonists

INVENTOR(S): Lee, Koo; Park, Heui-Sul; Ahn, In-Ae; Yoo, Hyun-Ju;

Choi, Sung-Pil; Choi, Deog-Young; Yim, Hyeon-Joo;

Kwon, O-Hwan; Kondoh, Yutaka

PATENT ASSIGNEE(S): Lg Life Sciences Ltd., S. Korea; Yamanouchi

Pharmaceutical Co., Ltd.

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

P	PATENT NO. KIN						D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
-																		
M	WO 2005047253					A1		2005	0526		WO 2	004-	KR29.	30		2	0041	112
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

KR 2005045927 A 20050517 KR 2004-92245 20041112

PRIORITY APPLN. INFO:: KR 2003-79800 A 20031112

OTHER SOURCE(S): MARPAT 143:7981

GΙ

The invention relates to amino acid derivs. I [R1 = H, (CH2)0-3-R6, (CH2)0-3CO-R6, (CH2)0-3SO2-R6, CO(CH2)0-3-R6; where R6 = (un)substituted alkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, amino or hydroxy; R2 = H, alkyl or cycloalkyl; or R1R2N = heterocyclyl; R3 = (un)substituted alkyl, (CH2)0-3-cycloalkyl, -Ph or -heteroaryl in which the rings may be substituted; R4 = Ph, cyclohexyl or an amino group; R5 = H, (CH2)0-3R7, where R7 = H, amino, OH, alkyl, acyl, carbamoyl, etc.], including pharmaceutically-acceptable salts, hydrates, solvates and isomers, which are effective agonists of the melanocortin receptor (MCR). Thus, (2R)-2-amino-N-[4-cyclohexyl-4-(tert-butylcarbamoyl)piperidin-1-yl]-3-(4-chlorophenyl)propionamide TFA salt was prepared via amidation reaction and showed EC50 = 0.005-0.5  $\mu$ M and IC50 = 0.1-0.5  $\mu$ M against MCR4.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 22 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:369273 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 142:430299

TITLE: Preparation of novel piperidine and

cyclohexanecarbonitrile derivatives effective in

enhancing LDL receptor manifestation

INVENTOR(S): Ban, Hitoshi; Ohnuma, Satoshi; Tsuboya, Norie; Asano,

Shigehiro

PATENT ASSIGNEE(S): Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE: PCT Int. Appl., 209 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2005037269
                               20050428
                                          WO 2004-JP15773
                                                                  20041019
                         Α1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
    EP 1679069
                               20060712
                                          EP 2004-792910
                                                                  20041019
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        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
    US 20070078120
                        A1
                               20070405
                                           US 2006-576581
                                                                  20060420
PRIORITY APPLN. INFO.:
                                           JP 2003-361256
                                                              A 20031021
                                           WO 2004-JP15773 W 20041019
                       MARPAT 142:430299
OTHER SOURCE(S):
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GΙ

AΒ Drugs for enhancing LDL receptor manifestation contains compds. represented by the following formula (I), prodrugs thereof, or pharmaceutically acceptable salts of either [m, n, p = 0-4, provided that  $3 \le m + n \le 8$ ; X = N, each (un) substituted CH; Y = each (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, or aromatic group, COY; R1 = H, each (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, 3- to 8-membered saturated heterocyclyl containing one (un)substituted NH or O, aromatic group, COR14; R14 = each (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, or aromatic group; R2-R7 = H, OH, each (un) substituted alkyl, alkoxy, alkoxycarbonyl, aralkyl, heteroarylalkyl, aralkyloxy, or heteroarylalkyloxy; or one or a plural combination of R2 and R3, R4 and R5, or R6 and R7 = oxo; or R2 and R4 together = alkylene; two of R2-R5 are on the adjacent carbon atom to form a double bond; Z = H, OH, CO2H, cyano, phthalimido, halo, each (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, or aromatic group, etc.] as active ingredients. These compds. are effective in enhancing low d. lipoprotein (LDL) receptor manifestation and lowering blood concentration of LDL cholesterol and are useful as therapeutic agents for treating hyperlipemia and arteriosclerosis. Thus,  $0.019~\mathrm{mL}$  benzyl bromide was added to a suspension of  $40~\mathrm{mg}$  4-(3methoxyphenyl)-1,4'- bipiperidine-4-carbonitrile dihydrochloride and 92.6 mg K2CO3 in 1.0 mL DMF under ice-cooling, and the resulting mixture was warmed to room temperature, stirred overnight, and quenched by adding water to give, after workup and silica gel chromatog., 15.6 mg 1'-benzyl-4-(3-methoxyphenyl)-1,1'- bipiperidine-4-carbonitrile (II). II at 10  $\mu$ M and N-benzyl-4-(3 $methoxyphenyl)-1-(pyrimidin-2-yl)piperidine-4-carbothioamide at 3 <math>\mu M$  enhanced the LDL receptor activity by 135 and 195%, resp.

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS

L5 ANSWER 23 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:220128 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 142:298111

TITLE: Preparation of 2-substituted benzimidazole piperidines

as selective melanin concentrating hormone receptor antagonists for the treatment of obesity and related

disorders

INVENTOR(S): Burnett, Duane A.; Wu, Wen-Lian; Sasikumar,

Thavalakulamgara K.; Greenlee, William J.; Caplen,

Mary Ann; Guo, Tao; Hunter, Rachael Catherine

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 57 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PAT	PATENT NO.					D	DATE			APPL	ICAT	ION :	NO.		D.	ATE		
US	2005	0054	628		A1		2005	0310		 US 2	004-	 9265	57		2	0040	826	
CA	2536	929			A1		2005	0317		CA 2	004-	2536	929		2	0040	826	
WO	2005	0237	98		A1		2005	0317		WO 2	004-	US27	734		2	0040	826	
	W:	ΑE,	ΑG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
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		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	
		,	TD,															
EP	1664	1022			A1		2006	0607		EP 2	004-	7822	52		2	0040	826	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	ВG,	CZ,	EE,	HU,	PL,	SK,	HR
	1845						2006											
JP	2007	5041	46		Τ		2007	0301		JP 2	006-	5248	46		2	0040	826	
MX 2006PA02372					Α		2006	0620		MX 2	006-	PA23	72		2	0060	228	
ORIT	Y APE	LN.	INFO	.:						US 2	003-	4988	76P		P 2	0030	829	
										WO 2	004-	US27	734		W 2	0040	826	
HER SO	OURCE	(S):			CASI	REAC	T 14	2:29	8111	; MA	RPAT	142	:298	111				

 $<sup>^{\</sup>star}$  STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT  $^{\star}$ 

AB Title compds. I [Y = bond, divalent alkyl, etc.; M = 0-1; n = 0, 2, 3; Ar = (hetero)aryl, R1 = H, alkyl, cycloalkyl, etc.; R4 = OH, alkoxy, etc.] are prepared For instance, II is prepared in 9 steps from 4-aminomethyl-1-benzyl-4-phenylpiperidine, 4,5-difluorobenzene-1,2-diamine and 3-cyanobenzeneboronic acid. In a selected example, a Ki of 3 nM for the melanin concentrating hormone (MCH) receptor is observed I are useful in treating obesity, metabolic disorders, eating disorders, e.g., hyperphagia and diabetes.

L5 ANSWER 24 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:160818 CAPLUS Full-text

DOCUMENT NUMBER: 142:261735

TITLE: Preparation of lincomycin derivatives as antibacterial

agents

INVENTOR(S): Lewis, Jason G.; Anandan, Sampath-Kumar; O'Dowd,

Hardwin; Gordeev, Mikhail F.

PATENT ASSIGNEE(S): Vicuron Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 125 pp., Cont.-in-part of U.S.

Ser. No. 777,455.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20050043248	A1	20050224	US 2004-871618	_	20040617
US 7199106	В2	20070403			
US 20040116690	A1	20040617	US 2003-642807		20030815
US 7164011	B2	20070116			
US 20040230046	A1	20041118	US 2004-777455		20040211
US 7199105	В2	20070403			
US 20050215488	A1	20050929	US 2004-992564		20041117
US 7256177	B2	20070814			
US 20060148722	A1	20060706	US 2005-217836		20050831
US 7361743	В2	20080422			
PRIORITY APPLN. INFO.:			US 2003-479296P	P	20030617
			US 2003-479502P	Р	20030617
			US 2003-642807	A2	20030815
			US 2004-777455	A2	20040211
			US 2002-403770P	Р	20020815
			US 2004-871618	A2	20040617
			US 2004-992564	A2	20041117

OTHER SOURCE(S): MARPAT 142:261735

GΙ

$$(R^9)$$
 t  $(R^9)$  t  $(R^9$ 

AB Lincomycin derivs. I, wherein the delocalized bond represents a double bond or a single bond; R1 is alkyl, SMe, S-alkyl, S-(2-hydroxyethyl), (heteroaryl)alkyl, H, halogen, alkyl-sulfanyl, alkenyl, alkoxy, cycloalkyl-alkyl; R2 and R3 are independently H, alkyl, alkenyl, alkoxy, CN, alkyl-

sulfanyl, OH, halo, oxime; R6 is H, alkyl, (carboxamide)alkyl, (carbamoyl)alkyl, alkoxycarbonyl, (alkoxycarbonyl)alkyl, (alkoxycarbonyl-amino)alkyl, amine; R9 is H, alkyl, halo, alkenyl, (heteroaryl)alkenyl, sulfonyl, X is (CH2)m; m is 0-2; t is 0-3; are prepared as antibacterial agents. The compds. of the subject invention may exhibit potent activities against bacteria, including gram pos. organisms, and may be useful antimicrobial agents. Methods of synthesis and of use the compds. are also disclosed. Title compds. have a min. inhibition concentration of 32  $\mu \text{g/mL}$  or less against at least one of the organisms selected from the group consisting of Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcusfaecalis, Enterococcusfaecium, Haemophilus influenzae, Moraxella catarrhalis, Escherichia coli, Bacteroidesfragilis, and Clostridium difficile. Thus, aminodeoxy glycoside II was prepared and tested in vitro as antibacterial agent.

REFERENCE COUNT: 101 THERE ARE 101 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L5 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:120944 CAPLUS Full-text

DOCUMENT NUMBER: 142:240671

TITLE: Preparation of lincomycin derivatives as antibacterial

agents

INVENTOR(S): Lewis, Jason G.; Anandan, Sampath K.; O'dowd, Hardwin;

Gordeev, Mikhail F.

PATENT ASSIGNEE(S): Vicuron Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 284 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PAT	FENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		DZ	ATE		
WO	2005	0123	20		A2		2005	0210		WO 2	004-	US19	 689		2	0040	617	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	$\mathrm{ML}_{{}_{\!{}^{\prime}}}$	MR,	NE,	
		SN,	TD,	ΤG														
US	2004	0116	690		A1		2004	0617		US 2	003-	6428	07		20	0030	815	
US	7164				В2		2007	0116										
US	2004		-				2004			US 2	004-	7774.	55		20	0040	211	
	7199						2007											
	2004							-		-		2615					-	
	2528				A1							2528				0040		
EP	1644							-				7768	-			0040	-	
	R:	AT,																
		•	•		•	•		•	•			BG,	•	•		•	,	HR
	2004											1153						
	1823				A							8002						
	2007									-		5174	-				-	
ИО	2005	0058	93		Α		2006	0314		NO 2	005-	5893			20	0051	212	

MX 2005PA13915	А	20060703	MX	2005-PA13915		20051216
PRIORITY APPLN. INFO.:			US	2003-479296P	P	20030617
			US	2003-479502P	P	20030617
			US	2003-642807	A	20030815
			US	2004-777455	A	20040211
			US	2002-403770P	P	20020815
			WO	2004-US19689	W	20040617

OTHER SOURCE(S): CASREACT 142:240671; MARPAT 142:240671

GΙ

$$(R^9)$$
 t  $(R^9)$  t  $(R^9$ 

AΒ Lincomycin derivs. I, wherein the delocalized bond represents a double bond or a single bond; R1 is alkyl, SMe, S-alkyl, S-(2-hydroxyethyl), (heteroaryl)alkyl, H, halogen, alkylsulfanyl, alkenyl, alkoxy, cycloalkylalkyl; R2 R3 are independently H, alkyl, alkenyl, alkoxy, CN, alkylsulfanyl, OH, halo, oxime; R6 is H, alkyl, (carboxamido)alkyl, (carbamoyl)alkyl, alkoxycarbonyl, (alkoxycarbonyl)alkyl, (alkoxycarbonyl-amino)alkyl, amine; R9 is H, alkyl, halo, alkenyl, (heteroaryl)alkenyl, sulfonyl, X is (CH2)m; m is 0-2; t is 0-3; are prepared as antibacterial agents. The compds. of the subject invention may exhibit potent activities against bacteria, including gram pos. organisms, and may be useful antimicrobial agents. Methods of synthesis and of use the compds. are also disclosed. Title compds. have a min. inhibition concentration of 32  $\mu g/mL$  or less against at least one of the organisms selected from the group consisting of Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcusfaecalis, Enterococcusfaecium, Haemophilus influenzae, Moraxella catarrhalis, Escherichia coli, Bacteroidesfragilis, and Clostridium difficile. Thus, aminodeoxy glycoside II was prepared and tested in vitro as antibacterial agent.

L5 ANSWER 26 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:14219 CAPLUS  $\underline{Full-text}$ 

DOCUMENT NUMBER: 142:114065

TITLE: Preparation of benzene and phenol derivatives as

inhibitors of sensory neuron specific (SNS) sodium

channels

INVENTOR(S): Jennings, Neil Stuart; Stokes, Stephen; Hamlyn,

Richard John; Tickle, David Christopher; Huckstep, Michael Richard; Lynch, Rosemary; Knutsen, Lars Jacob

Stray

PATENT ASSIGNEE(S): Ionix Pharmaceuticals Limited, UK

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
		2005 2005				A2 A3		2005 2005			 WO 2	004-	 GB26	 97		2	0040	624
		W:	AE, CN, GE, LK, NO, TJ, BW, AZ, EE,	AG, CO, GH, LR, NZ, TM, GH, BY, ES,	CR, GM, LS, OM, TN, GM, KG, FI,	AM, CU, HR, LT, PG, TR, KE, KZ,	AT, CZ, HU, LU, PH, TT, LS, MD, GB,	AU, DE, ID, LV, PL, TZ, MW, RU, GR, CF,	AZ, DK, IL, MA, PT, UA, MZ, TJ,	DM, IN, MD, RO, UG, NA, TM, IE,	DZ, IS, MG, RU, US, SD, AT, IT,	EC, JP, MK, SC, UZ, SL, BE, LU,	EE, KE, MN, SD, VC, SZ, BG, MC,	EG, KG, MW, SE, VN, TZ, CH, NL,	ES, KP, MX, SG, YU, UG, CY, PL,	FI, KR, MZ, SK, ZA, ZM, CZ, PT,	GB, KZ, NA, SL, ZM, ZW, DE, RO,	GD, LC, NI, SY, ZW AM, DK, SE,
PRIOF			LN.	TD, INFO							GB 2 US 2	003- 003- 003- 003-	1514 4857	0 42P		A 2 P 2	0030 0030 0030 0030	627 710
OTHER	R SOURCE(S):					MAR:	PAT	142:	1140	რ.ხ								

OTHER SOURCE(S): MARPAT 142:114065

GΙ

$$(R^1)$$
  $n$ 
 $X^1-Ar-X^2-Y$   $I$ 
 $R^4$ 
 $R^4$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^4$ 

Benzenes I [wherein each R1 independently is halo, alk(yl/oxy), alkylthio, hydroxy, amino or (di)alkylamino; n is 0-3; X1 is a direct bond or -L-O/S/NR'-L1-; L and L1 are direct bond or alkylene; R' is H or alkyl; Ar is 5/6-membered heteroaryl or Ph group; X2 is a direct bond -L2-O/S/NR'-, C(O) or S(O); L2 is a direct bond or alkylene; Y is alkylene, alkyl, Ph or hetero(aryl/cyclyl); et al., with some limitations], phenol derivs. II [wherein R1 = H, alkyl, (hetero)aryl or (hetero)cyclyl; each R2 independently = alkyl, halo, alkoxy, alkylthio, OH, NO2, cyano, amino or (di)alkylamino; R3 = H, alkyl, or links with R4; R4 = H, alkyl, (hetero)aryl or (hetero)cyclyl; n

= 0-4; X = CH2, C(0), S(0), S(0)2; Het = heteroaryl or heterocyclyl], and pharmaceutically acceptable salts thereof were prepared as inhibitors of sensory neuron specific (SNS) sodium channels. For example, reductive amination of 4-benzyloxybenzaldehyde with 1-(S)-(5-methylthiazol-2-yl)ethylamine trifluoroacetate (preparation given) in the presence of triethylamine and sodium cyanoborohydride gave III in 27% yield, which showed IC50 of 3.83  $\mu\rm M$  against human Nav1.8 ion channel. Therefore, the invented compds. and pharmaceutical compns. thereof are useful as analgesic and neuroprotective agents.

L5 ANSWER 27 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:999707 CAPLUS Full-text

DOCUMENT NUMBER: 141:424382

TITLE: Preparation of lincomycin thio glycoside derivatives

possessing antibacterial activity

APPLICATION NO.

DATE

INVENTOR(S): Lewis, Jason G.; Patel, Dinesh V.; Anandan, Sampath

Kumar; Gordeev, Mikhail F.

PATENT ASSIGNEE(S): Vicuron Pharmaceuticals Inc., USA

KIND DATE

SOURCE: U.S. Pat. Appl. Publ., 102 pp., Cont.-in-part of U.S.

Ser. No. 642,807.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.

ra.	LT-IAT 1			17 7 141	D	DAIE			WLLT	ICAI	1014	110.		וט	AIT.		
US US	2004 7199		046		A1 B2		2004 2007		1	US 2	004-	7774	55		2	0040	211
US	2004		690		A1		2004		1	US 2	003-	6428	0.7		2.1	0030	815
US	7164		000		В2		2007			00 -		0 1 2 0	•		_		010
	2528	-			A1		2005		(	CA 2	004-	2528	596		2	0040	617
WO	2005	0076	65		A2		2005	0127	1	WO 2	004-	US19	497		2	0040	617
WO	2005	0076	65		А3		2005	0818									
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		•	•	•	•	•	PL,	•	•	•	•	•	•	•	•	•	•
							TZ,				•					•	
	RW:						MW,										
							RU,				•						
		•	•	•	•	•	GR,	•	•	•	•	•	•	•	•	•	•
					BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
	0004	,	TD,	TG	3.4		0005	0010			004	0615	F 0		0	0040	64.0
	2004		50		A1		2005				004-					0040	
_	2528		2.0		A1		2005	-		_	004-	-				0040	
WO	2005	-	-	7). T	A2		2005				004-			DV		0040	-
	W:						AU,										
				•	•		DE, ID,	•			•				•	•	
		•	•	-	-	•	LV,	-	•	•		•	•	•	-	•	
		•	•	•	•	•	PL,	•	•	•	•	•	•	•	•	•	•
		•	•	•	•	•	TZ,	•	•	•	•	•	•	•	•	•	•
	RW:	BW,					MW,										
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		SN,	TD,	ΤG															
US	20050	0432	248		A1		2005	0224		US	200	4 - 8	8716	18		2	20040	617	
US	71991	.06			В2		2007	0403											
EP	16443	93			A2		2006	0412		EΡ	200	4-	7768	16		2	20040	617	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, T	R,	BG,	CZ,	EE,	HU,	PL,	SK,	HR
EP	16542	68			A2		2006	0510		EΡ	200	4-	7859	49		2	20040	617	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,	
							TR,												
BR	20040	1150	37		A		2006	0801		BR	200	4 - 1	1153	7		2	20040	617	
BR	20040	1153	34		Α		2006	0822		BR	200	4-1	1153	4		2	20040	617	
CN	18230	183			A		2006			CN	200	4 - 8	8002	0301		2	20040	617	
JP	18230 20075	161	72		T		2007	0621		JΡ	200	6-5	5174	64		2	20040	617	
JP	20075	2836	5 O		T		2007	1011		JΡ	200	6-5	5173	86		2	20040	617	
US	20050	2154	488		A1		2005	0929		US	200	4 - 9	9925	64		2	20041	117	
US	72561	.77			В2		2007	0814											
US	20060	148	722		A1		2006	0706		US	200	5-2	2178	36		2	20050	831	
US	73617	43			В2		2008	0422											
NO	20050	0589	93		A		2006	0314		ИО	200	5-	5893			2	20051	212	
MX	2005P	A139	915		А		2006	0703		MΧ	200	5-1	PA13	915		2	20051	216	
MX	2005P	A140	064		A		2006	0711				-		064			20051		
PRIORITY	Y APPL	Ν.	INFO	.:						US	200	2-	4037	70P		P 2	20020	815	
										US	200	3-	4795	02P		P 2	20030	617	
										US	200	3-6	6428	07		A2 2	20030	815	
										US	200	3-	4792	96P		P 2	20030	617	
										WO	200	3-1	JS25	820		A 2	20030	815	
										US	200	4-	7774	55		A 2	20040	211	
										US	200	4 - 8	8716	18		A2 2	20040	617	
										WO	200	4 - 0	JS19	497		W 2	20040	617	
										WO	200	4 - 0	JS19	689		W 2	20040	617	
										US	200	4 - 9	9925	64		A2 2	20041	117	
OTHER SO	OURCE (	S):			MARE	PAT	141:	4243	32										

GΙ

Lincomycin thio glycoside derivs. I, wherein R1 is alkyl; R2 and R3 are independently H, alkyl, hydroxy, fluoro, or cyanoalkyl or one of R2 and R3 is = NOR7 and the other is absent, or one of R2 and R3 is = CH2 and the other is absent, with the proviso that both R2 and R3 are not H; when one of R2 and R3 is fluoro, the other is not hydrogen or hydroxy; and when one of R2 and R3 is hydroxy, the other is not fluoro, hydrogen, or hydroxy; R6 is selected from the group consisting of H, alkyl, hydroxyalkyl, -C(O)O-alkylen-cycloalkyl, -C(O)O-alkylene-substituted cycloalkyl,-C(O)O-alkylene-substituted alkyl, -C(O)O-aryl, -C(O)O-substituted aryl, -C(O)O-heteroaryl, -C(O)O-substituted heteroaryl, -[C(O)O]p-alkyleneheterocycle, -[C(O)O]p-alkylene-substituted heterocycle, wherein p = O-1; R7 is H or alkyl; R9 is hydrogen, alkyl, alkoxyalkoxy, cycloalkyl, alkoxyalkoxy, substituted oxygen, substituted

nitrogen, halogen, Ph, substituted Ph, -(CH2)m-OH, -(CH2)m-NR4R5, -alkylene-Ra where Ra is monofluorophenyl and monochlorophenyl, and branched chain isomers thereof wherein m is an integer of from 1 to 8 inclusive and R4 and R5 are H or alkyl; n is 1 or 2; are disclosed. These lincomycin derivs. exhibit antibacterial activity. As the compds. of the subject invention exhibit potent activities against bacteria, including gram pos. organisms, they are useful antimicrobial agents. Methods of synthesis and of use of the compds. are also disclosed. Prodrugs, tautomers or pharmaceutically acceptable salts thereof; with the proviso that the compound of formula I has a min. inhibition concentration of 32  $\mu$ g/mL or less against at least one of the organisms selected from the group consisting of Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcus faecalis, Enterococcus faecium, Haemophilus influenzae, Moraxella catarrhalis, Escherichia coli, Bacteroides fragilis, Bacteroides thetaiotaomicron, and Clostridium difficile. Thus, 1-(4-n-propyl-N-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl]](methylthio)tetrahydropyran-2-y1]-2-methylprop-1-y1]acetamide was prepared and tested in mice as antibacterial agent.

REFERENCE COUNT:

106 THERE ARE 106 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L5 ANSWER 28 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:252507 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 140:287409

TITLE: Preparation of carbamoylpiperazines as melanocortin-4

receptor agonists

INVENTOR(S): Bakshi, Raman Kumar; Nargund, Ravi P.; Palucki, Brenda

L.; Park, Min K.; Ye, Zhixiong

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
WO	2004	0247	20		A1	_	2004	0325		 WO 2	003-	 US27	 892		2	0030	905
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PG,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,	TM,	TN,	TR,
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OTHER SOURCE(S): MARPAT 140:287409

Piperazines I [R1 = H, (un)substituted alkyl, cycloalkyl, aryl, heteroaryl; R2 = H, (un)substituted alkyl, aryl, cycloalkyl, heterocyclyl, heteroaryl, CH2C.tplbond.CH, CH2CHF2; R3-R10 = H, (un)substituted alkyl, aryl, cycloalkyl, heterocyclyl, heteroaryl; R3R5, R3R9, R5R7, R7R9 = atoms required to complete a 5-7-membered ring; X = (un)substituted alkyl, cycloalkyl, aryl, heteroaryl, heterocyclyl, CN, CONH2, CO2H, acyl, NH2, SH, s(O)H, SO2H, OH; Y = H, (un)substituted alkyl, alkenyl, cycloalkyl, aryl, heteroaryl, heterocyclyl; m = 1, 2] were prepared for use as agonists of the human melanocortin-4 receptor (MC-4R) and, in particular, as receptor-subtype selective agonists of MC-4R. They are useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity and diabetes. Thus, (R)-4-FC6H4CH2CH(CO2H)NHCO2CMe3 was treated with 1-cyclohexyl-4-tert.-butoxycarbamoylpiperidine hydrochloride, followed by deblocking and reaction with cis-2,6-dimethylpiperazine to give the title compound II.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 29 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:162704 CAPLUS Full-text

DOCUMENT NUMBER: 140:199635

TITLE: Preparation of lincomycin thio glycoside derivatives

possessing antibacterial activity

INVENTOR(S): Lewis, Jason; Patel, Dinesh V.; Kumar, Anandan S.;

Gordeev, Mikhail F.

PATENT ASSIGNEE(S): Vicuron Pharmaceuticals, Inc., USA; Anandan, Sampath

Κ.

SOURCE: PCT Int. Appl., 143 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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PRIORITY APPLN. INFO.:
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      US 2004-777455
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      WO 2004-US19497
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OTHER SOURCE(S): MARPAT 140:199635
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Lincomycin thio glycoside derivs. I, wherein R1 is alkyl; R2 and R3 are AΒ independently H, alkyl, hydroxy, fluoro, or cyanoalkyl or one of R2 and R3 is = NOR7 and the other is absent, or one of R2 and R3 is = CH2 and the other is absent, with the proviso that both R2 and R3 are not H; when one of R2 and R3 is fluoro, the other is not hydrogen or hydroxy; and when one of R2 and R3 is hydroxy, the other is not fluoro, hydrogen, or hydroxy; R6 is selected from the group consisting of H, alkyl, hydroxyalkyl, -C(0)0-alkylen-cycloalkyl, -C(0) O-alkylene-substituted cycloalkyl, -C(0) O-alkyl, -C(0) O-substituted alkyl, -C(0)0-aryl, -C(0)0-substituted aryl, -C(0)0-heteroaryl, -C(0)0-substituted heteroaryl, -[C(0)0]p-alkyleneheterocycle, -[C(0)0]p-alkylene-substituted heterocycle, wherein p = 0-1; R7 is H or alkyl; R9 is hydrogen, alkyl, alkoxyalkoxy, cycloalkyl, alkoxyalkoxy, substituted oxygen, substituted nitrogen, halogen, Ph, substituted Ph, -(CH2)m-OH, -(CH2)m-NR4R5, -alkylene-Ra where Ra is monofluorophenyl and monochlorophenyl, and branched chain isomers thereof wherein m is an integer of from 1 to 8 inclusive and R4 and R5 are H or alkyl; n is 1 or 2; are disclosed. These lincomycin derivs. exhibit antibacterial activity. As the compds. of the subject invention exhibit potent activities against bacteria, including gram pos. organisms, they are useful antimicrobial agents. Methods of synthesis and of use of the compds. are also disclosed. Prodrugs, tautomers or pharmaceutically acceptable salts thereof; with the proviso that the compound of formula I has a min. inhibition concentration of 32  $\mu$ g/mL or less against at least one of the organisms selected from the group consisting of Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcus faecalis, Enterococcus faecium, Haemophilus influenzae, Moraxella catarrhalis, Escherichia coli, Bacteroides fragilis, Bacteroides thetaiotaomicron, and Clostridium difficile. Thus, 1-(4-n-propyl-N-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-methylpyrrolidin-2-yl]-N-[1-[3,4,5-trihydroxy-6-methyl(methylthio)tetrahydropyran-2-yl]-2-methylprop-1-yl]acetamide was prepared and tested in mice as antibacterial agent.

L5 ANSWER 30 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:991507 CAPLUS Full-text

DOCUMENT NUMBER: 140:42206

TITLE: Preparation of piperazinylacylpiperidines as

inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S): Bono, Francoise; Bosch, Michaeel; Dos Santos, Victor;

Herbert, Jean Marc; Nisato, Dino; Tonnerre, Bernard;

Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr. SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT:

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AΒ Title compds. I [wherein: Y = (CH2)n; n = 1 or 2; R1 = halo, CF3, alkyl, alkoxy, trifluoromethoxy; R2 = H, halo; R3 = H, OR5, CH2OR5, NH2 and derivs., NHCOR6 and derivs., NHCONH2 and derivs., CH2NR7R8, CH2NHCONH2 and derivs., alkoxycarbonyl, CONH2 and derivs.; or R3 forms a double bond between the carbon atom where it is bound to and the neighboring carbon atom of the piperidine cycle; R4 = 1,3-thiazol-2-yl; R5 = H, alkyl, alkylcarbonyl; R6 = alkyl, (CH2) mNH2 and derivs.; m = 1, 2, or 3; R7, R8 = independently H, alkyl; R8 = (CH2)qOH, (CH2)qSMe; q = 2 or 3; or R7R8N = aziridine, azetidine, pyrrolidine, piperidine, morpholine; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, I (m.p. =  $157-158^{\circ}$ ) was prepared by reacting 2-chloro-1-[4-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-1- ethanone (preparation given) and 1-(1,3-thiazol-2-yl)piperazine dihydrochloride (preparation given) in the presence of KI/K2CO3/MeCN. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of  $10-11~\mathrm{M}$  to  $10-6~\mathrm{M}$  at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of  $10-11~\mathrm{M}$  to  $10-6~\mathrm{M}$  at the cellular level.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 31 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:991506 CAPLUS Full-text

DOCUMENT NUMBER: 140:27846

TITLE: Preparation of piperazinylacylpiperidines as

inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S): Bono, Francoise; Bosch, Michaeel; Dos, Santos Victor;

Herbert, Jean Marc; Nisato, Dino; Tonnerre, Bernard;

Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.; Dos Santos, Victor

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

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AT	325122	T	20060615	AT	2003-757109		20030605
NZ	537044	A	20060831	ΝZ	2003-537044		20030605
AT	336491	T	20060915	AT	2003-757108		20030605
PT	1513836	T	20060929	PT	2003-757109		20030605
ES	2264001	Т3	20061216	ES	2003-757109		20030605
ES	2271637	Т3	20070416	ES	2003-757108		20030605
TW	283671	В	20070711	TW	2003-92115416		20030606
US	20050176722	A1	20050811	US	2004-516704		20041202
ZA	2004009823	A	20060726	ZA	2004-9823		20041203
NO	2004005331	A	20050307	NO	2004-5331		20041206
IN	2004KN01862	A	20060407	IN	2004-KN1862		20041206
MX	2004PA12341	A	20050930	MX	2004-PA12341		20041207
PRIORIT	Y APPLN. INFO.:			FR	2002-7001	Α	20020607
				WO	2003-FR1685	W	20030605

OTHER SOURCE(S): MARPAT 140:27846 GI

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AΒ Title compds. I [wherein: Y = (CH2)n; n = 1 or 2; X = (CH2)p; p = 1 or 2; R1 =halo, CF3, alkyl, alkoxy, trifluoromethoxy; R2 = H, halo; R3 = H, OR5, CH2OR5, NH2 and derivs., NHCOR6 and derivs., NHCONH2 and derivs., CH2NR7R8, CH2NHCONH2 and derivs., alkoxycarbonyl, CONH2 and derivs.; or R3 forms a double bond between the carbon atom where it is bound to and the neighboring carbon atom of the piperidine cycle; R4 = (un)substituted pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, 3(2H)-pyridazinon-5-yl, 3(2H)-pyridazinon-4-yl; R5 = H, alkyl, alkylcarbonyl; R6 = alkyl, (CH2)mNH2 and derivs.; m = 1, 2, or 3; R7, R8 = independently H, alkyl; R8 = (CH2)qOH, (CH2)qSMe; q = 2 or 3; or R7R8N =aziridine, azetidine, pyrrolidine, piperidine, morpholine; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II $\bullet$ HCl was prepared by reacting 1-(2-pyrazinyl)piperazine (preparation given) with 2-chloro-1-[4-[3-(trifluoromethyl)phenyl]-1piperidinyl]-1-ethanone (preparation given) in the presence of KI/K2CO3/MeCN,

followed by acidulation with HCl. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M at the cellular level.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 32 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:892748 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 139:381377

TITLE: Preparation of 4-substituted N-acylpiperidines as

melanocortin receptor ligands for controlling weight

gain

INVENTOR(S): Ebetino, Frank Hallock; Liu, Xuewei; Solinsky, Mark

Gregory; Wos, John August

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	PATENT NO.						KIND DATE			APPLICATION NO.						DATE		
W	0 2003093234				A1 20031113			WO 2003-US11536						20030416				
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			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MΖ,	NI,	NO,	NZ,	OM,
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG	, SK,	SL,	ТJ,	TM,	TN,	TR,	TT,
			TZ,	UA,	UG,	UZ,	VC,	VN,	YU,	ZA,	ZM	I, ZW						
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG	СН,	CY,	CZ,	DE,	DK,	EE,	ES,
			FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC	, NL,	PT,	RO,	SE,	SI,	SK,	TR,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ	, GW,	ML,	MR,	NE,	SN,	TD,	ΤG
U	US 20030236230									US 2003-410775					20030409			
U	S	70263	335			В2		2006										
		2483787				A1				CA 2003-2483787						2	20030	416
		2003230923							AU 2003-230923							20030		
E	Ρ	1499588														20030		
		R:										I, IT,						PT,
												, TR,						
		20030						2005				2003-					20030	
		16560				A 20050817												
						T 20050825												
		53609				A 20060929 A 20050707												
								2005						20041021				
		20041				A		2005										
		20040				A		2005				2004-						
		20050				A1		2005				2005-					20050	
		20051				A		2007	0810			2005-					20050	
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OTHER SOURCE(S): MARPAT 139:381377

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AB The present invention relates to compds. that comprise a 4-substituted piperidine ring linked to a (un)substituted hydrocarbyl ring (shown as I; variables defined below; e.g. II) that are useful for controlling weight gain (no data). For I, including all enantiomeric and diastereomeric forms and pharmaceutically acceptable salts thereof: R is substituted aryl, W is a pendant unit -L-Q: L is a linking unit, Q is preferably a cyclic hydrocarbyl unit; W1 is preferably a carbocyclic unit and W2 is a heteroatom comprising unit; addnl. details are given in the claims. The compds. of the present invention will interact preferentially (i.e., selectively) to MC-4 and/or MC-3, relative to the other melanocortin receptors (no data). Although the methods of preparation are not claimed, 5 example prepns. of I and many example prepns. of intermediates are included.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 33 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:855758 CAPLUS Full-text

DOCUMENT NUMBER: 139:364829

TITLE: Preparation of heterocyclo inhibitors of potassium

channel function

INVENTOR(S): Lloyd, John; Jeon, Yoon T.; Finlay, Heather; Yan, Lin;

Beaudoin, Serge; Gross, Michael F.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA; Icagen, Inc.

SOURCE: PCT Int. Appl., 330 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT NO.	KIND I	DATE .	APPLICATION NO.	DATE
WO 2003088908 WO 2003088908		 20031030 20040527	WO 2003-US11807	20030416
CO, CR, CU, GM, HR, HU, LS, LT, LU,	CZ, DE, ID, IL, LV, MA,	DK, DM, DZ, IN, IS, JP, MD, MG, MK,	BB, BG, BR, BY, EC, EE, ES, FI, KE, KG, KP, KR, MN, MW, MX, MZ, SG, SK, SL, TJ,	GB, GD, GE, GH, KZ, LC, LK, LR, NI, NO, NZ, OM,
		VC. VN. YU.		,,,

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003223651 20031103 AU 2003-223651 20030416 Α1 EP 1501467 A2 20050202 EP 2003-719792 20030416 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK Τ JP 2003-585661 JP 2005529114 20050929 20030416 NO 2004004351 Α 20041013 NO 2004-4351 20041013 PRIORITY APPLN. INFO.: US 2002-374279P P 20020419 W 20030416 WO 2003-US11807

OTHER SOURCE(S): MARPAT 139:364829

GΙ

$$\begin{bmatrix} R^2 & J - R^3 \\ I & D & D \\ Q & R^2 & I \end{bmatrix}$$

The title compds. [I; m, p = 0-3 (provided that the sum of m and p is at least 2); Q = NR1, O, S, SO, SO2; R1 = H, C(:\mathbb{W})NR6R7, SO2NR6R7, OCONR6R7, etc.; R2 = heteroaryl, heteroarylalkyl, aryl, etc.; J = a bond, alkylene; R3 = R5, OR5, SO2R5, etc.; R5 = CN, heteroaryl, aryl, etc.; R6, R7 = H, alkyl, OH, etc.; W = (un) substituted NH, N(CO2H), N(CN), N(SO2H), CH(NO2); Rx = H, alkyl, hydroxyalkyl, aryl, etc.], useful as inhibitors of potassium channel function (especially inhibitors of the Kv1 subfamily of voltage gated K+ channels, especially inhibitors Kv1.5 which has been linked to the ultra-rapidly activating delayed rectifier K+ current IKur) in the prevention and treatment of arrhythmia and IKur-associated conditions, were prepared E.g., a multi-step synthesis of II [starting from bis(2-chloroethyl)amine], was given. Pharmaceutical composition comprising the compound I is claimed.

L5 ANSWER 34 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:610426 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 139:149925

TITLE: Preparation of hydroxyalkanoyl aminopyrazoles and

related compounds for inhibiting  $\beta$ -amyloid

peptide release

INVENTOR(S): Tung, Jay S.; Guinn, Ashley C.; Thorsett, Gene;

Pleiss, Mike A.

PATENT ASSIGNEE(S): Elan Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003064396	A1	20030807	WO 2003-US3143	20030131

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20040108
                                            US 2003-355700
     US 20040006085
                          Α1
                                                                    20030131
     US 7053220
                          В2
                                20060530
PRIORITY APPLN. INFO.:
                                            US 2002-353214P
                                                                P 20020201
OTHER SOURCE(S):
                         MARPAT 139:149925
     The invention is directed to a class of compds. R3OCR2(Q)CR5R5aCO-X [X is
AB
     heterocyclylamino, arylamino, carbomethoxyalkylamino, etc.; Q is Q1 or alkyl-
     O-Q1, where Q1 is (un)substituted alk(en)(yn)yl, cycloalkyl, carbocyclyl,
     aryl, heterocyclyl; R2 is H, Me, Et, Pr, or Bu; R3 is H, alkyl,
     (thio)alkanoyl, or carbamoyl; R5 is any group given for Q1 or alkoxy; R5a is H
     or alk(en)yl], including (hydroxyalkanoyl)aminopyrazoles, -aminothiadiazoles,
     -amino acid esters, -amino acid amides, -amino alcs., -amino ketones, and -
     hydantoins. Pharmaceutical formulations containing compds. of the invention
     are useful for inhibiting \beta-amyloid peptide release and/or synthesis,
     inhibiting \gamma-secretase activity, and treating neurol. disorders, including
     Alzheimer's disease, associated with \beta-amyloid peptide production The
     preparation of N-aminohydantoins used in the construction of
     hydroxyalkanoylaminohydantoins is given in the examples. Thus, N3-amino-5,5-
     diphenylimidazolidine-2,4-dione was prepared from 5,5-diphenylydantoin and
     hydrazine monohydrate and reacted with Boc-protected L-phenylglycine to
     prepare N3-[(2S)-aminophenylacetamido]-5,5- diphenylimidazolidine-2,4-dione.
REFERENCE COUNT:
                         1
                               THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L5
     ANSWER 35 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
                         2003:472390 CAPLUS Full-text
                         139:53026
TITLE:
                         Preparation of ureidobenzothiazoles as adenosine
                         receptor ligands
                         Flohr, Alexander; Jakob-Roetne, Roland; Norcross,
INVENTOR(S):
                         Roger David; Riemer, Claus
PATENT ASSIGNEE(S):
                         F. Hoffmann-La Roche Ag, Switz.
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ACCESSION NUMBER: DOCUMENT NUMBER:

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.				KIND DATE				APPLICATION NO.						DATE		
					_											
WO 2003	0497	41		A1 20030619			WO 2002-EP13761						20021205			
W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	ВG,	BR,	BY,	BZ,	CA,	CH,	CN,
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	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,
	UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
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		FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NI	J, E	PΤ,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML	, l	MR,	NE,	SN,	TD,	ΤG		
US	2003	0149	036		A1		2003	0807		US	200	02-3	3083	38		2	20021	203
US	6727	247			В2		2004	0427										
CA	2469	596			A1		2003	0619	1	CA	200	02-2	2469.	596		2	20021	205
AU	2002	3566	26		A1		2003	0623		AU	200	02-3	3566	26		2	20021	205
AU	2002	3566	26		В2	:	2007	1129										
BR	2002	0148	25		Α		2004	0914		BR	200	02-1	1482	5		2	20021	205
EP	1455	792			A1		2004	0915		EΡ	200	02-8	3045	78		2	20021	205
EP	1455	792			В1		2007	0418										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	٦,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,			LV,		RO,	MK,	CY,	ΑL	٠, -	ΓR,	BG,	CZ,	EE,	SK		
CN	1602	196			А	:	2005	0330	1	СИ	200	02-8	3246.	54		2	20021	205
JP	2005	5160					2005	0602	1	JΡ	200	03-5	5507	90		2	20021	205
	3597				T			0515									20021	
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	7019				В2			0328										
		PA05			А		2004	1011						44			20040	
PRIORIT	Y APF	LN.	INFO	.:												A 2	20011	210
														38			20021	
									,	WO	200	02-I	EP13	761		W 2	20021	205

OTHER SOURCE(S): MARPAT 139:53026

Ι

GΙ

L5

AΒ Title compds. [I; R = alkoxy, halo; R1, R2 = H, alkyl, cycloalkyl, tetrahydropyran-4-yl; R1R2N = (substituted) 2-oxa-5- azabicyclo[2.2.1]heptyl, 3-endo-hydroxy-8-azabicyclo[3.2.1]octyl, 2-azabicyclo[2.2.2]octyl, 1-oxo-2,8diazaspiro[4.5]decyl, 3-azaspiro[5.5]undecyl, 8-azaspiro[4.5]decyl, 1-oxa-8azaspiro[4.5]decyl, 1,8,8-trimethyl-3-azabicyclo[3.2.1]octyl, 1,4-oxazepanyl, 2-oxa-5-azabicyclo[2.2.2]octyl, 8-oxa-3-azabicyclo[3.2.1]octyl, 1,4diazabicyclo[3.2.1]octyl, 2-azabicyclo[2.2.1]heptyl, 3-azabicyclo[3.2.1]octyl, piperazinyl, piperidin-1-yl; X = 0, CH2; n = 0-4], were prepared Thus, 4- ${\tt methoxy-7-morpholin-4-ylbenzothiazol-2-ylamine}$  in CH2Cl2 was treated with pyridine and Ph chloroformate and the resulting solution stirred for 45 min at ambient temperature; (1S, 4S)-2-oxa-5- azabicyclo[2.2.1]heptane was added and the mixture stirred at ambient temperature for  $15~\mathrm{min}$  and at  $40~\mathrm{for}$  2.5 h. to give (1S,4S)-2-oxa-5- azabicyclo[2.2.1]heptane-5-carboxylic acid (4-methoxy-7morpholin-4- ylbenzothiazol-2-yl)amide. This bound to human A2a receptors with pKi = 8.5.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2003:257877 CAPLUS Full-text

DOCUMENT NUMBER: 138:255224

TITLE: Preparation of oxazolidinones

INVENTOR(S): Kawanami, Hajime; Ikushima, Yutaka; Torii, Kazuo PATENT ASSIGNEE(S): National Institute of Advanced Industrial Science and

Technology, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

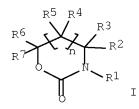
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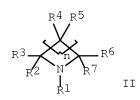
DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003096058	 А	20030403	JP 2001-291202	20010925
JP 3873115	B2	20070124	01 2001 291202	20010929
PRIORITY APPLN. INFO.:			JP 2001-291202	20010925
OTHER SOURCE(S):	CASREA	ACT 138:25522	24; MARPAT 138:255224	
GT				





AB The compds. I [R1-R7 = H, (un)substituted aryl, C1-15 alkyl, alkenyl, alkynyl, cycloalkyl, etc.; n=0-5] are prepared by reaction of cyclic amines II (R1-R7, n= same as I) with CO2 in the presence of halogen catalysts. 2-Phenylaziridine was treated with CO2 in the presence of I in EtOH at 40° under 100 kg/cm2 for 15 h to give 91.0% 2-phenyloxazolidinone.

L5 ANSWER 37 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:76612 CAPLUS Full-text

DOCUMENT NUMBER: 138:137588

TITLE: Preparation of bridged piperidine amino acid

derivatives as melanocortin receptor agonists

INVENTOR(S): Ye, Zhixiong; Barakat, Khaled J.; Guo, Liangqin;

Nargund, Ravi P.; Sebhat, Iyassu K.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.						DATE				LICAT				D	ATE	
WO	2003	0079	49		A1	_	2003	0130							2	0020	712
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	, KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	, MX,	MΖ,	NO,	NZ,	OM,	PH,	PL,
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		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,
		PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		ΝE,	SN,	TD,	TG												
CA	2453	609			A1		2003	0130		CA 2	2002-	2453	609		2	0020	712
AU	2002	3204	94		A1		2003	0303		AU 2	2002-	3204	94		2	0020	712
AU	2002	3204	94		В2		2006	0629									
EP	1411	940			A1		2004	0428		EP 2	2002-	7500	14		2	0020	712
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
JP	2004	5382	81		Τ		2004	1224		JP 2	2003-	5135	56		2	0020	712
US	US 20040180923						2004	0916		US 2	2004-	4839	13		2	0040	114
US	7115	628			В2		2006	1003									
PRIORIT	Y APP	LN.	INFO	.:						US 2	2001-	3063	59P		P 2	0010	718
										WO 2	2002-	US22	258		W 2	0020	712
OTHER S	OURCE	(S):			MAR:	PAT	138:	1375	88								

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$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

AΒ Novel bridged piperidine derivs. I [R1 = H or (un)substituted alkyl, (CHR7)0-2cycloalkyl, (CHR7)1-20(CHR7)aryl, or (CHR7)0-2-(hetero)aryl, where R7 = H or (un) substituted alkyl, (CH2) 0-2phenyl, -naphthyl, -heteroalkyl, or cycloalkyl; or two R7 groups may form a ring; R2 = H, alkyl, (CH2)0-2cycloalkyl or -aryl; X = (CR3R4)1-2, where R3, R4 = H, alkyl, (CH2)0-2cycloalkyl or -aryl, OH, halo, or amino; R5 = H, alkyl, (CH2)0-2-(hetero)aryl, -cycloalkyl, or -heterocyclyl, acyl, CH2C.tplbond.CH, CO2R7, CH2CHF2, CONR72, SO2R7, etc.; Y = H, (un)substituted alk(en)yl, (CH2)0-2cycloalkyl, -Ph,-naphthyl, -heteroaryl, or -heterocyclyl; Z = alkyl or (CH2)0-2 attached to certain rings or functional groups] were prepared as agonists of human melanocortin receptor(s), in particular, the human melanocortin-4 receptor (MC-4R). They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, and sexual dysfunction. Thus, I (R1 = p-FC6H4CH2, R2 = R5 = H, X = CH2, Y = cyclohexyl, Z = Me3CNHCO) was prepared as

diastereomers via a coupling reaction. Compds. of the invention were found to bind to MC-4R (IC50 < 2  $\mu\text{M}$ , EC50 < 1  $\mu\text{M}$ ).

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 38 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN L5ACCESSION NUMBER: 2002:813930 CAPLUS Full-text

DOCUMENT NUMBER: 137:325334

TITLE: Preparation of aryl and biaryl piperidines as MCH

antagonists

INVENTOR(S): Hobbs, Douglas W.; Guo, Tao; Hunter, Rachael C.; Gu,

Huizhong; Babu, Suresh D.; Shao, Yuefei

Pharmacopeia, Inc., USA PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 113 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT :	NO.			KIN	D	DATE				LICAT				D	ATE	
WO	2002	0831	34		A1	_	2002	1024							2	0020	410
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		MG,	MK,	MN,	MX,	MZ,	NO,	NΖ,	PH,	PL,	PT,	RO,	RU,	SE,	SG,	SI,	SK,
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CA	2443	672			A1		2002	1024		CA 2	2002-	2443	672		2	0020	410
AU	2002	3032	99		A1		2002	1028		AU 2	2002-	3032	99		2	0020	410
US	2003	0013	720		A1		2003	0116		US 2	2002-	1200	80		2	0020	410
US	6887	889			В2		2005	0503									
EP	1377	293			A1		2004	0107		EP 2	2002-	7313	18		2	0020	410
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
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JP	2004	5267	61		Τ		2004	0902		JP 2	2002-	5809	38		2	0020	410
MX	2003	PA09.	353		Α		2004	0212		MX 2	2003-	PA93	53		2	0031	010
PRIORIT	Y APP	LN.	INFO	.:						US 2	2001-	2835	23P		P 2	0010	412
										WO 2	2002-	US11	296		W 2	0020	410
OTHER SO	OURCE	(S):			MAR:	PAT	137:	3253	34								

GΙ

AB The title compds. [I; Ar1 = (un)substituted Ph, pyridyl, pyrimidyl, etc.; Z = R4, COR4, SO2R4, etc.; R2 = H, alkyl, alkyl substituted with cycloalkyl; R3 = H, alkyl, cycloalkyl, etc.; R4 = Ph, phenylalkyl], useful for treatment, prevention or amelioration of one or more of diseases associated with the MCH receptor, were prepared E.g., a 7-step synthesis of II, starting from 3,4-difluorophenyl isocyanate, which showed Ki of 11-100 nM against MCH, was given. This invention provides also pharmaceutical compns. containing one or more of the compds. I for treatment of eating disorders.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 39 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:793427 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 137:310932

TITLE: Preparation of N-substituted nonaryl heterocyclyl amides as NMDA/NR2B antagonists for relieving pain

INVENTOR(S): Liverton, Nigel J.; Butcher, John W.; McIntyre,

Charles J.; Claiborne, Christopher F.; Claremon, David

A.; McCauley, James A.; Romano, Joseph J.; Thompson,

Wayne; Munson, Peter M.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 270 pp.

CODEN: PIXXD2

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DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
WO	2002	0809.	28		A1	_	2002	1017	,	 WO 2	002-	 US10.	 269		2	0020	402
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CA	2443	108			A1		2002	1017	1	CA 2	002-	2443	108		2	0020	402
AU	2002	3383.	34		A1		2002									0020	402
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US	7259	157			В2		2007	0821									
EP	1390	034			A1		2004	0225		EP 2	002-	7638	96		2	0020	402
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	JP 2005511478				Τ		2005	0428								0020	
PRIORIT	ORITY APPLN. INFO.:									US 2						0010	
OTHER CO	211000	(0)			1175	D 7 III	107	2100		WO 2	002-	US10	269	Ţ	W 2	0020	402

OTHER SOURCE(S): MARPAT 137:310932

GΙ

The title compds. [I; NonAr = nonarom. 5-7 membered containing heteroatoms; A AΒ = (un)substituted Ph, pyrrolyl, imidazolyl, etc.; B = aryl(CH2)0-3(CH2)0- 2CO, heteroary1(CH2)1-30(CH2)0-2CO, etc.; X = H, OH, F, etc.] which are effective as NMDA NR2B antagonists useful for relieving pain, were prepared E.g., a 2step synthesis of II, starting with 4-aminomethylpiperidine, was given. The compds. I exhibit IC50's of less than 50  $\mu\text{M}$  in the FLIPR and binding assays, and thus they have been found to exhibit biol. activity as NMDA NR2B antagonists.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 40 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN L5 ACCESSION NUMBER: 2002:675992 CAPLUS Full-text

DOCUMENT NUMBER: 137:216873

TITLE: Acvlated piperidine derivatives, specifically

1-(pyrrolidinylcarbonyl)piperidines,

1-(piperidinylcarbonyl)piperidines, and analogs, as

melanocortin-4 receptor agonists, and their pharmaceutical compositions and therapeutic uses

INVENTOR(S): Goulet, Mark T.; Nargund, Ravi P.; Sebhat, Iyassu K.;

Ujjainwalla, Feroze; Walsh, Thomas F.; Warner, Daniel;

Young, Jonathan R.; Bakshi, Raman K. Merck & Co., Inc., USA; Ye, Zhixiong

PATENT ASSIGNEE(S): PCT Int. Appl., 138 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068387 WO 2002068387	A2 A3	20020906 20030220	WO 2002-US5623	20020225
W: AE, AG,	AL, AM, AT	, AU, AZ, BA,	BB, BG, BR, BY,	BZ, CA, CH, CN,
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GM, HR,	HU, ID, IL	, IN, IS, JP,	KE, KG, KR, KZ,	LC, LK, LR, LS,
LT, LU,	LV, MA, MD	, MG, MK, MN,	MW, MX, MZ, NO,	NZ, OM, PH, PL,
PT, RO,	RU, SD, SE	, SG, SI, SK,	SL, TJ, TM, TN,	TR, TT, TZ, UA,
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     CA 2439149
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     AU 2002255597
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                                20060302
     EP 1372653
                          A2
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                                                                    20020225
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                          В1
                                20061004
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US 2001-300118P P 20010622

JP 2002-567902 A3 20020225

WO 2002-US5623 W 20020225

US 2003-468515 A3 20030819
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OTHER SOURCE(S): MARPAT 137:216873

GΙ

Certain novel 4-substituted N-acylated piperidine derivs., specifically I, are AB agonists of the human melanocortin receptor(s) and, in particular, are selective agonists of the human melanocortin-4 receptor (MC-4R) [wherein: p = 1 or 2; q = 0, 1, or 2; n = 0, 1, or 2; R1 = H, amidino, alkyliminoyl, (un) substituted alkyl, (CH2) n-G1 [G1 = (un) substituted cycloalkyl, Ph, naphthyl, or heteroaryl]; R2 = (un)substituted Ph, naphthyl, or heteroaryl; X = alkyl, (CH2)n-G2 [G2 = (un)substituted cycloalkyl, Ph, naphthyl, heteroaryl, heterocyclyl, cyano, CONH2, CO2H, OH, NH2, and various derivs.]; Y = (un) substituted alkyl, alkenyl, (CH2)n-G3 [G3 = (un) substituted cycloalkyl, Ph, naphthyl, heteroaryl, or heterocyclyl]; including pharmaceutically acceptable salts]. They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Approx. 200 invention compds. I and approx. 80 intermediates were prepared For instance, amidation of (±)-trans-1-(tertbutoxycarbonyl)-3-(4- fluorophenyl)piperidine-4-carboxylic acid with 4cyclohexyl-4-[(4,4- dimethyl-2-oxo-1,3-oxazolidin-3-yl)methyl]piperidine HCl, followed by N-deprotection with removal of BOC using HCl, and reductive Nmethylation using paraformaldehyde and NaBH3CN, gave title compound (±)-trans-II, isolated as the trifluoroacetate salt. Representative compds. I bound to cloned human MC-4R in vitro with IC50 values generally below 2  $\mu M$ , and also acted as agonists toward cloned human MCR in a functional assay with EC50 values less than 1  $\mu M$ .

ANSWER 41 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:675785 CAPLUS Full-text

DOCUMENT NUMBER: 137:216872

TITLE: Acylated piperidine derivatives, specifically 1-[(aminocycloalkyl)carbonyl]piperidines, as

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

melanocortin-4 receptor agonists, and their pharmaceutical compositions and therapeutic uses Goulet, Mark T.; Nargund, Ravi P.; Ujjainwalla,

Feroze; Walsh, Thomas F.; Warner, Daniel

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 106 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

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	PATENT NO.										LICAT						
	2002										2002-					0020	
WC	2002	0678	69		А3		2003	0227									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	ΒA,	BE	B, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	E, EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW	7, MX,	MZ,	NO,	NZ,	OM,	PH,	PL,
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	2002									AU	2002-	2503	43		2	0020	225
AU	2002	2503	43		В2		2006	0525									
EF	1385	506			A2		2004	0204		ΕP	2002-	7192	51		2	0020	225
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	R, IT,	LI,	LU,	NL,	SE,	MC,	PT,
											, TR						
JF	2004	5306	56		T		2004	1007		JΡ	2002-	5672	41		2	0020	225
US	2004	0092	501		A1		2004	0513		US	2003-	4685	17		2	0030	819
US	7012	084			В2		2006	0314									
US	US 20060025442				A1		2006	0202		US	2005-	2397	70		2	0050	930
PRIORIT	Y APP	LN.	INFO	.:						US	2001-	2722	59P		P 2	0010	228
										WO	2002-	US80	02		W 2	0020	225
										US	2003-	4685	17	,	A3 2	0030	819
OTHER S	OURCE	(S):			MAR:	PAT	137:	2168	72								

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Certain novel 4-substituted N-acylated piperidine derivs., specifically I, are agonists of the human melanocortin receptor(s) and, in particular, are selective agonists of the human melanocortin-4 receptor (MC-4R) [wherein: p = 1 or 2; q = 0, 1, or 2; n = 0, 1, or 2; R1, R2 = H, amidino, alkyliminoyl, (un)substituted alkyl, (CH2)n-G1 [G1 = (un)substituted cycloalkyl, Ph, naphthyl, or heteroaryl]; or NR1R2 = 4- to 8-membered mono- or bicyclic ring system optionally containing an addition O, S, or N-alkyl atom(s); R3 = (un)substituted Ph, naphthyl, or heteroaryl; X = alkyl, (CH2)n-G2 [G2 = (un)substituted cycloalkyl, Ph, naphthyl, heteroaryl, heterocyclyl, cyano, CONH2, CO2H, OH, NH2, and various derivs.]; Y = H, (un)substituted alkyl, alkenyl, cycloalkyl, (CH2)n-G3 [G3 = (un)substituted cycloalkyl, Ph, naphthyl, heteroaryl, or heterocyclyl]; including pharmaceutically acceptable salts]. They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity,

diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Approx. 40 invention compds. I and approx. 20 intermediates were prepared For instance, the intermediate ester (±)-trans-Me 2-(4-chlorophenyl)-4- oxocyclohexanecarboxylate (preparation given) was saponified and the resulting acid was used to amidate 4-cyclohexyl-4-[(4,4-dimethyl-2-oxo-1,3-oxazolidin-3-yl)methyl]piperidine HCl. The obtained keto amide was aminated using dimethylamine, Ti(OPr-iso)4, and NaBH4, to give epimeric invention compds.  $\alpha-$  and  $\beta-$ II, isolated sep. as the trifluoroacetate salts. Representative compds. I bound to cloned human MC-4R in vitro with IC50 values generally below 2  $\mu$ M, and also acted as agonists toward cloned human MCR in a functional assay with EC50 values less than 1  $\mu$ M.

L5 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:171864 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 136:232312

TITLE: Preparation of dialkoxyaminoquinazolines as alpha-1

adrenergic antagonists

INVENTOR(S): Becker, Cyrus Kephra; Melville, Chris Richard;

Pfister, Juerg Roland; Zhang, Xiaoming

PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PA:	TENT	NO.			KIN	D	DATE			APP	LICAT	ION	NO.		D	ATE	
	2002 2002									WO	2001-	 EP97	49		2	0010	823
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL	, TJ,	TM,	TR,	TT,	TZ,	UA,	UG,
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	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
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		ВJ,	CF,	CG,							, ML,						
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OTHER SOURCE(S): MARPAT 136:232312

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AΒ Title compds. I [R1 = H, alkyl; R2 = alkyl, (un)substituted heterocyclyl, heteroaryl or aryl; R7 and R8 independently = alkyl; A = H, (CH2)0-1R3, COR3, SO2R3, CO2R3, CONR4R5, SO2NR4R5, C(NR6)R5 or C(NR6)NR4R5; R3 = (un) substituted alkyl, aryl, arylalkyl, heteroaryl, etc.; R4 and R5 independently = H, or R4R5 together form 5-7 membered cycloalkyl or heterocyclyl; R6 = H, alkyl, CN; n = 0-2 and m = 0-3 wherein m + n  $\geq 2$ ] or prodrugs, individual isomers, racemic or non-racemic mixts. of isomers, or pharmaceutically acceptable salts or solvates thereof are prepared and disclosed as alpha-1B adrenergic receptor antagonists. Thus, II was prepared via substitution of 2-chloro-6,7-dimethylquinazolin-4- ylamine with (1-benzyl-4-phenyl-piperidin-4-ylmethyl)-methylamine, followed by N-debenzylation. II possessed a pKi of 7.99 toward alpha-1B, pKi of 6.52 toward alpha-1A, and pKi of 6.60 toward alpha-1D. The invention further relates to pharmaceutical compns. containing I and the use of such compds. in the control and prevention of diseases, such as disorders of the urinary tract, sexual dysfunction, pain, or disorders of the central nervous system.

Ι

ANSWER 43 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:157581 CAPLUS Full-text

DOCUMENT NUMBER: 136:216648

TITLE: Preparation of substituted piperidines as melanocortin

receptor agonists

INVENTOR(S): Bakshi, Raman K.; Barakat, Khaled J.; Lai, Yingjie;

> Nargund, Ravi P.; Palucki, Brenda L.; Park, Min K.; Patchett, Arthur A.; Sebhat, Iyassu; Ye, Zhixiong

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 128 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PA'	TENT	NO.			KIN	D	DATE				JICAT				D	ATE	
WO	2002	 0159	 09		 A1	_	2002	0228							2	 0010	 817
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,
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	RW:	GH,	GM,	KE,	LS,	MW,	${ m MZ}$ ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
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EP	1320										2001-						
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OTHER SO	ER SOURCE(S):					PAT	136:	2166		WO 2	2001-	US25	/5/		w 2	0010	8T \

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## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AΒ Title compds. [I; X = C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl, etc.; X = C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl, etc.; R1 = H, C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl; Q = amino-tetrahydronaphthyl, aminobenzocycloheptyl, methylamino- tetrahydronaphthyl, aminoindanyl, aminobenzothiopyranyl, amino-1,4-dihydro-1,4-methanonaphthyl, etc.; n = 0, 1, 2], stereoisomers, and pharmaceutically acceptable salts are prepared as agonists of the human melanocortin receptors and, in particular, as selective agonists of the human melanocortin-4 receptor (MC-4R). Title compds. I are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Pharmaceutical composition including title compds. I and second active ingredient are claimed. Thus, the title compound II was prepared from 4-F-D-Phe-4-cyclohexyl-piperidine-4-carboxylic acid Et ester HCl salt and cis-1,2,3,4-tetrahydro-1-tert-butoxycarbonyl-naphthalene-2-carboxylic acid, which was prepared from 1,2-dihydroaphthalene, C1SO2NCO.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 44 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN 2002:143285 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 136:200107

TITLE: Preparation of indoles and azaindoles as tachykinin

antagonists

INVENTOR(S): Dinnell, Kevin; Elliott, Jason Matthew; Hollingworth,

Gregory John; Shaw, Duncan Edward

PATENT ASSIGNEE(S): Merck Sharp & Dohme Ltd., UK SOURCE: U.S. Pat. Appl. Publ., 26 pp. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ US 20020022624 US 6476045 A1 20020221 US 2001-903108 20010711 B2 20021105

PRIORITY APPLN. INFO.: GB 2000-17256
OTHER SOURCE(S): CASREACT 136:200107; MARPAT 136:200107 GB 2000-17256 A 20000713

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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The title compds. [I; Het = II-VI] (wherein the dotted line represents an AΒ optional double bond; A completes a fused pyridine ring; and B completes a fused benzene or pyridine ring); X = 0, S, H2, :NH, :N(alkyl); Y = alkylene, alkenylene, alkynylene; Z = CR5R6, NR7; R1a, R1b = H, alkyl, alkoxy, etc.; R2 = H, alkyl, fluoroalkyl, etc.; R3 = (un)substituted Ph, biphenyl, naphthyl, etc.; R4 = H, alkyl, C0, etc.; R5, R6 = H, halo, alkyl, etc.; R7 = alkyl, cycloalkyl, naphthyl, etc.] which are of particular use in the treatment or prevention of depression, anxiety, pain, inflammation, migraine, emesis or postherpetic neuralgia, were prepared Thus, treating Me 5-chloro-2-(4chlorophenyl)-1-methyl-1H- pyrrolo[2,3-b]pyridine-3-propanoate (preparation given) with LiOH in MeOH/THF/H2O followed by reaction of the resulting acid with 4-(phenylmethyl)-4-piperidinol in the presence of 1-hydroxybenzotriazole, Et3N and 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide. HCl in THF afforded 83% oxopropyl}-4-(phenylmethyl)-4-piperidinol.

ANSWER 45 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:817246 CAPLUS Full-text

135:357843 DOCUMENT NUMBER:

TITLE: Preparation of 2-Aryl indole derivatives for use as

tachykinin receptor antagonists

INVENTOR(S): Dinnell, Kevin; Elliott, Jason Matthew; Hollingworth,

Gregory John; Ridgill, Mark Peter; Shaw, Duncan Edward

PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 37 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ US 20010039286 A1 US 2001-782422 20010213 GB 2000-3397 A 20000214 20011108 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 135:357843

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$$\mathbb{R}^{4}$$

$$\mathbb{R}^{6}$$

$$\mathbb{R}^{5}$$

$$\mathbb{R}^{2}$$

2-Aryl indole derivs. I (wherein Rla, Rlb, and R2 = a variety of substituents; AB R3 = optionally substituted Ph, biphenyl or naphthyl or heteroaryl group; R4 = H, (C1-6)alkyl, carbonyl (=0), (CH2)pphenyl or a (C1-2)alkylene bridge across the piperidine ring; R5 and R6 = variety of substituents; or R5 and R6 together are linked so as to form an optionally substituted 5-or 6-membered ring; X = O or S, two H atoms, boxHNH or boxHN(C1-6 alkyl); Y = straight or branched (C1-4)alkylene, (C2-4)alkenylene or (C2-4)alkynylene chain; the dotted line represents an optional double bond; m = 0,1,2,3,4; n = 1,2,3,4; and p = 1, 2, 3, 4), or a pharmaceutically acceptable salt thereof, were prepared, and their use as tachykinin receptor antagonists evaluated. diisopropylethylamine and bromoacetonitrile were added to a loaded resin (synthetic preparation given) in N-methylpyrrolidinone, to which was added a solution of 6-(methylsulfonyl)spiro-[2H-1-benzopyran-2,4'-piperidin]-4(3H)-one in THF to give 1'-{3-[5-chloro-2-(4-chlorophenyl)-1H-indol-3-yl]-1-oxopropyl}-6- (methylsulfonyl)spiro(2H-1-benzopyran-2,4'-piperidin)-4(3H)-one. The compds. are of particular use in the treatment or prevention of depression, anxiety, pain, inflammation, migraine, emesis or postherpetic neuralgia. Biol. data are given.

L5 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:880962 CAPLUS Full-text

DOCUMENT NUMBER: 134:42445

TITLE: Preparation of piperidine amino acid derivatives as

melanocortin-4 receptor agonists

INVENTOR(S): Bakshi, Raman K.; Barakat, Khaled J.; Nargund, Ravi

P.; Palucki, Brenda L.; Patchett, Arthur A.; Sebhat, Iyassu; Ye, Zhixiong; Van, Der Ploeg Leonardus H. T. Merck & Co., Inc., USA; Van Der Ploeg, Leonardus H. T.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Va

SOURCE: PCT Int. Appl., 124 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
TO 2000074670	A1 20001		20000531
WO 2000074679	A1 20001	1214 WO 2000-US14930	20000331
W: AE, AG, AI	, AM, AT, AU,	AZ, BA, BB, BG, BR, BY,	CA, CH, CN, CR,
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MA, MD, MG	, MK, MN, MW,	MX, MZ, NO, NZ, PL, PT,	RO, RU, SD, SE,
SG, SI, SF	, SL, TJ, TM,	TR, TT, TZ, UA, UG, US,	UZ, VN, YU, ZA, ZW
RW: GH, GM, KE	, LS, MW, MZ,	SD, SL, SZ, TZ, UG, ZW,	AT, BE, CH, CY,
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     US 6350760
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     US 20020137664
                          A1 20020926
                                              US 2001-990499
                                                                        20011121
     AU 2003248456
                           A1 20031106
                                              AU 2003-248456
                                                                        20030929
                                               US 1999-137477P P 19990604

US 1999-169209P P 19991202

WO 2000-US14930 W 20000531

US 2000-585111 A3 20000601
PRIORITY APPLN. INFO.:
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OTHER SOURCE(S): MARPAT 134:42445

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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Piperidine derivs. I [R2C2 = aryl, 5- or 6-membered heteroaryl or AB heterocyclyl, 5- to 7-membered carbocyclyl, which may be substituted; L =(CRb2)m, where Rb = H, alkyl, (CH2)n-cycloalkyl or -aryl; m = 0-2, n = 0-3; X, Y = (CH2)0-2; Ra = H, alkyl, (CHRb)n-cycloalkyl, -aryl, -heteroaryl, -O(CHRb)naryl, which may be substituted; Re = H, alkyl, (CH2)n-aryl, cycloalkyl, -heteroaryl, which may be substituted, acyl, sulfonyl, etc.; R1 = H, alkyl, (CH2)n-cycloalkyl, -aryl, -heteroaryl, -heterocyclyl; R2 = any group given for R1, CN, (CH2)n-carboxamido, -carboxy, -acylamino, sulfonylamino, amino, etc.] were prepared as agonists of the human melanocortin receptors, in particular, the human melanocortin-4 receptor (MC-4R). They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Thus, II trifluoroacetate, prepared by coupling of Et 1-(D-4chlorophenylalanyl)-4- cyclohexyl-4-[(1,2,4-triazol-1-yl)methyl]piperidine trifluoroacetate (preparation given) with N-tert-butoxycarbonyl-1,2,3,4tetrahydroisoquinoline-3- carboxylic acid (Boc-D-Tic), was > 2,200-fold, > 10,000-fold, and > 580-fold selective for the human MC-4R over human MC-1R, MC-2R, and MC-3R, resp.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 47 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:874202 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 134:29410

TITLE: Preparation of oxazolidinones and related compounds as

adrenergic  $\alpha 1 \text{A}$  receptor antagonists

INVENTOR(S): Lagu, Bharat; Dhar, Tg Murali; Nagarathnam,

Dhanapalan; Jeon, Yoon T.; Marzabadi, Mohammad R.;

Wong, Wai C.; Gluchowski, Charles

PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA

SOURCE: U.S., 74 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6159990	A	20001212	US 1998-99225	19980617
US 6620815	B1	20030916	US 2000-636518	20000810
PRIORITY APPLN. INFO.:			US 1997-50096P P	19970618
			US 1998-99225 A1	19980617
OTHER SOURCE(S):	MARPAT	134:29410		

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Title compds. [I; X = 0, S; X1 = 0, S, NH; R2 = H, (CH2)rXR3, CO2R3, alkyl, aminoalkyl, alkenyl, alkynyl, etc.; r = 1-4; R3 = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl; R4 = (substituted) aryl, heteroaryl, aralkyl, heteroarylalkyl, etc.; R5 = H, (substituted) aryl, aralkyl, heteroarylalkyl, heteroaryl; adjacent R2R5 = aryl, heteroaryl, indanyl, tetrahydronaphthyl, cycloalkyl, heterocyclyl; Z = (substituted) acyl, alkenyl linker; R1 = (substituted) arylpiperidinyl, arylpiperazinyl, etc.], were prepared Thus, 4-(3,4-difluorophenyl)oxazolidin-2-one was stirred with NaH in THF/HMPA followed by addition of 1,5-dibromopentane to give 50% 4-(3,4-difluorophenyl)-1-(5-bromopentyl)oxazolidin-2-one. this was refluxed with K2CO3 and 1-(2-methoxyphenyl)piperazine in dioxane to give 88% 4-(3,4-difluorophenyl)-3-[5-[4-(2-methoxyphenyl)piperazin-1-yl]pentyl]oxazolidin-2-one. The latter bound to human  $\alpha$ 1A,  $\alpha$ 1D  $\alpha$ 1B receptors with Ki = 0.5, 11, and 21, resp.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 48 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:643016 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 133:223053

TITLE: Preparation of amino acid amide derivatives for use as

calcitonin gene-related peptide antagonists in

pharmaceutical compositions

INVENTOR(S): Eberlein, Wolfgang; Rudolf, Klaus; Engel, Wolfhard;

Doods, Henri; Hallermayer, Gerhard

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 36 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19911039	A1	20000914	DE 1999-19911039	19990312
CA 2361939	A1	20000921	CA 2000-2361939	20000308
WO 2000055154	A1	20000921	WO 2000-EP2004	20000308

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             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
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                                            EP 2000-922505
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     JP 2002539208
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PRIORITY APPLN. INFO.:
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                                                                 Α
                                                                    19990312
                                             US 1999-129937P
                                                                 Р
                                                                    19990419
                                             WO 2000-EP2004
                                                                    20000308
                                                                 W
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OTHER SOURCE(S): MARPAT 133:223053

GΙ

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

Title compds., e.g.(I; see patent for general claims), were prepared and tested as CGRP antagonists for use in pharmaceutical prepns. for treatment of headache, non-insulin dependent diabetes mellitus, cardiovascular diseases, skin diseases, inflammatory diseases, allergic rhinitis, asthma, morphine tolerance, and menopausal hot flashes (formulations given), and for use as diagnostic or anal. aides in RIA or ELISA assays and as diagnostic or analytic auxiliary agents in neurotransmitter research. Thus, di-Ph methanesulfonylimidocarbonate was reacted with 1-(4-amino-3,5-dibromo-D-phenylalanyl)-4-(1-piperidinyl)piperidine (as the bis-trifluoroacetate salt), and the product further reacted with 3,4-dihydro-3-(4-piperidinyl)-2(1H)-quinazolinone to give I (27%). In in vitro tests of human calcitonin gene related peptide (CGRP) receptor binding using Sk-N-MC-cells, title compds. had  $\text{IC50} \leq 104 \text{ nM}$ , and in the same system, had CGRP-antagonist activity at doses from 10-11-10-5M.

L5 ANSWER 49 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:314546 CAPLUS Full-text

English

DOCUMENT NUMBER: 132:321801

TITLE: Preparation of 4-[(benzoylamino)methyl]piperidines and

analogs as potassium channel inhibitors

INVENTOR(S): Bao, Jianming; Kayser, Frank; Kotliar, Andrew;

Parsons, William H.; Rupprecht, Kathleen M.;

Claiborne, Christopher F.; Liverton, Nigel; Claremon,

David A.; Thompson, Wayne J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 91 pp.

PCT Int. Appl., 91 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

LANGUAGE:

PAT	PATENT NO.					)	DATE			APP	LICAT	ION I	NO.		D.	ATE	
WO	2000	02578	86		A1	_	2000	0511		WO	1999-	US25	066		1	 9991	026
	W:	ΑE,	AL,	AM,	AT,	ΑU,	ΑZ,	ΒA,	BB,	ВG	, BR,	BY,	CA,	CH,	CN,	CR,	CU,
		CZ,	DE,	DK,	DM,	EE,	ES,	FΙ,	GB,	GD	, GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	ΚE,	KG,	KR,	KΖ,	LC,	LK	LR,	LS,	LT,	LU,	LV,	MA,	MD,
		MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,	PΤ	, RO,	RU,	SD,	SE,	SG,	SI,	SK,
		SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US	, UZ,	VN,	YU,	ZA,	ZW		
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ	, UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU	, MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GW,	$ ext{ML}$ ,	MR,	NE	, SN,	TD,	ΤG				
US	6303	637			В1		2001	1016		US	1999-	4225	00		1	9991	021
CA	2348									CA	1999-	2348	735		1	9991	026
CA	2348	735					2007										
EP	1126	849			A1		2001	0829		EΡ	1999-	9551	69		1	9991	026
EP	1126	849			В1		2005	0309									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO										
JP	2002	52850	03		Τ		2002	0903		JΡ	2000-	5792	27		1	9991	026
AU	7645	15			В2		2003	0821		AU	2000-	1133	8		1	9991	026
AT	2903	82			Τ		2005	0315		ΑT	1999-	9551	69		1	9991	026
PRIORITY	IORITY APPLN. INFO.:		.:						US	1998-	1062	92P	I	P 1	9981	030	
										WO	1999-	US25	066	I	W 1	9991	026
OTHER SO	ER SOURCE(S):				MARI	PAT	132:	32180	01								

$$\begin{array}{c}
\mathbb{R}^{1} \xrightarrow{\mathbb{R}^{2}} \mathbb{R}^{2} \\
\mathbb{R}^{1} \xrightarrow{\mathbb{R}^{2}} \mathbb{R}^{3}
\end{array}$$

GI

Title compds. [I; R1 = CH2NR10COR6; R2,R6 = (un)substituted Ph; R3,R4 = H, halo, alkyl, acyl, etc.; R10 = H, alkyl, acyl, etc.; Z = O, S00-2, NR5; R5 = H, OH, alkyl, acyl, etc.; Z1,Z2 = bond, CH2, CH2CH2] were prepared as potassium channel inhibitors (no data). Thus, 4-cyano-1-benzyl-4-phenylpiperidine was reduced and the product N-acylated by 2-(MeO)C6H4COC1 to

give, after deprotection and Ac2O acylation, 2-(MeO)C6H4CONHCH2Z3Ac (Z3 = 4-phenylpiperidine-4,1-diyl).

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 50 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:811218 CAPLUS Full-text

DOCUMENT NUMBER: 132:49974

TITLE: Preparation of heterocyclic compounds as hypoglycemic

agents

INVENTOR(S): Suzuki, Mikio; Ohdoi, Keisuke; Kato, Katsuhiro;

Matsumoto, Hiromitsu; Toyama, Koji; Kitahara, Masaki;

Yotsumoto, Takashi

PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 227 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND	DATE		I	APPL	ICAT	ION 1	NO.		D	ATE	
					-						_		
WO 9965881		A1	19991	1223	V	VO 1	999-	JP32:	14		1	9990	616
W: AU	J, CA, CN,	CZ, F	I, HU,	IL,	KR,	LT,	MX,	NO,	NΖ,	RO,	RU,	SI,	SK,
UZ	, US, ZA												
RW: Al	C, BE, CH,	CY, D	E, DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	ΝL,
Pl	SE SE												
JP 2001031	A	20010	0206	Ċ	JP 1	999-	1723	66		1	9990	618	
PRIORITY APPLN.	INFO.:				Ċ	JP 1	998-	1724	35	Ž	A 1	9980	619
					·	JP 1	999-	14069	93	Ž	A 1	9990	520

OTHER SOURCE(S): MARPAT 132:49974

GΙ

AB The title compds. [I; A = CH[(CH2)mR1](CH2)nR2, II, III (wherein m, n, n1, n2 = 0-3; R1 = H, halo, NO2, etc.; R2 = H, halo, NO2, etc.; R3, R31 = alkyl; R4 = H, alkyl, acyl, etc.); D = a bond, CH2, O, etc.; X1-X5 = N, CR5 (R5 = H, halo,

etc.)] having a hypoglycemic effect, and therefore useful for preventing and treating diabetes and diabetic complications, were prepared and formulated. Thus, reacting 2,6-dichloro-4-(2- phenoxyethoxy)pyrimidine (preparation given) with Me 3(R)-amino-4-(tert- butoxycarbonylamino)butyrate afforded 86% (R)-IV which showed 53.4% carnitine-palmitoyl transferase (CPT) inhibition at 30  $\mu\text{M}$ . REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:736657 CAPLUS Full-text

DOCUMENT NUMBER: 131:336948

TITLE: Preparation of piperidine derivatives with growth

hormone releasing properties

INVENTOR(S): Hansen, Thomas Kruse; Ankersen, Michael

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den. SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KINI	)	DATE			API	PLI	CAT	ION 1	NO.		D.	ATE	
WO	9958	501			A1	_	1999	1118		WO	19:	 99-I	 DK26	0		1	 9990	510
	W:	ΑE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	В	3, 1	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GF	Η, (	GM,	HR,	HU,	ID,	IL,	IN,	IS,
		JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,	LK,	LE	₹,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU	J, :	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
		TM,	TR,	TT,	UA,	UG,	UZ,	VN,	YU,	ZI	A, :	ZW						
	RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	UC	3, 3	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,
		ES,	FI,	FR,	GB,	GR,	IE,	ΙΤ,	LU,	MO	C, 1	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
		CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SI	١, ١	TD,	ΤG					
US	6303	620			В1		2001	1016		US	199	99-3	3061	51		1	9990	506
CA	2329	881			A1		1999	1118 1129 0206 0130		CA	199	99-2	2329	881		1	9990	510
AU	9937	010			А		1999	1129		ΑU	199	99-3	3701	0		1	9990	510
_	7572				В2		2003	0206										
	9910				А		2001	0130		BR	199	99-1	1032	9		1	9990	510
EP	1077				AI		Z U U I	.0228		ĽР	19:	99-	9191.	25		1	9990	
	R:					DK,	ES,	FR,	GB,	GI	₹,	ΙΤ,	LI,	LU,	ΝL,	SE,	PT,	IE,
			LT,															
	2001							0328		HU	20	01-2	2071			1	9990	510
	2001							0628										
	2004							0108						05			9990	-
_	2243				C2			1227						84			9990	-
	1945				В1			0629			-		-	42			9990	-
	2229				В			1101						8436			9990	
	2000							0904					5820				0001	
	2000	_			A			0419		MX	20	00-I	PA10.	585		2	0001	-
	2000		621		A			0304		IN	20	00-0	CN62	1		2	0001	
	2000		68		A B1			0110		ИО	20	00-5	5668			2	0001	110
	3180				ВТ		2005	0131			10						0000	
PRIORIT	Y APP	LN.	TNF.O	.:													9980	
											-	98-8	-	c =			9980	
														6P			9980	-
														7P			9980	-
													PA87				9980	
0.000								2260		WO	т9!	99-l	JK261	0		w I	9990	210

OTHER SOURCE(S): MARPAT 131:336948

$$\begin{array}{c} \text{DCON} & \text{(CH2)mG} \\ \text{DCON} & \text{CON} & \text{(CH2)n} \\ \text{(CH2)p} & \text{E} \end{array}$$

Disubstituted piperidine compds. I [R1 = H, alkyl; m, q = 0-3; n, p = 0-5; D = AB R2NH(CR3R4)e(CH2)fM(CHR5)g(CH2)h; G = O(CH2)kR8, substituted heterocyclyl or Ph or naphthyl; J = O(CH2)1R13, substituted heterocyclyl or Ph or naphthyl; E = CONR18, CO2R19, etc.], with growth hormone releasing properties, were prepared E.g.,  $1-\{(2R)-2-[N-((2E)-5-amino-5-methylhex-2-enoyl)-N$ methylamino]-3-(2-naphthyl)propionyl}-4- benzylpiperidine-4-carboxylic acid methylamide was prepared

REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 52 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:227936 CAPLUS Full-text

DOCUMENT NUMBER: 130:282070

Preparation of N-[[1-(4-cyanobenzyl)-1H-imidazol-5-TITLE:

yl]methyl]piperidines and analogs as farnesyl protein

transferase inhibitors

Anthony, Neville J.; Gomez, Robert P.; Wai, John S.; INVENTOR(S):

Embrey, Mark W.; Fisher, Thorsten E.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 91 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 5891889	 А	19990406	US 1997-831308	-	19970401
US 6248756	B1	20010619	US 1999-248883		19990211
PRIORITY APPLN. INFO.:			US 1996-14791P	Р	19960403
			US 1997-831308	АЗ	19970401
OTHER SOURCE(S).	MARPAT	130.282070			

OTHER SOURCE(S): MARPAT 130:282070

GΙ

The invention is directed to compds. which inhibit farnesyl-protein AΒ transferase (FPTase) and the farnesylation of the oncogene protein Ras. The invention is further directed to chemotherapeutic compns. containing the compds., and methods for inhibiting FPTase and Ras farnesylation using them. In particular, title compds. I and II and their pharmaceutically acceptable salts are claimed [wherein Ar = (un)substituted Ph; R1 = H, Me; Q1 = (un) substituted (CH2) 0-4; X = bond, CH2, CO, (un) substituted NHCO, S, SO, or SO2; Y = H, (un)substituted alkyl, OH or derivs., SH or derivs., NH2 or derivs., etc.; X1 = bond, (un) substituted NHCO or NH, O, S, SO, SO2; A1, A2 =

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

bond, CH:CH, CO, O, (alkyl)imino, etc.; Q2 = (un)substituted (CH2)0-2; Z = (un)substituted aryl; addnl. substituents allowed on piperidine ring]. Over 130 invention compds. and numerous intermediates were prepared For instance, the invention compound III was claimed in particular, and was prepared in 5 steps. Thus, Et isonipecotate underwent a sequence of: (1) N-protection with BOC; (2) deprotonation and alkylation in the 4-position using NaN(SiMe3)2 and 3-(CF30)C6H4CH2Br; (3) reduction of the Et ester to a hydroxymethyl group using LiAlH4; (4) removal of the BOC group with HCl; and (5) reductive alkylation at N using 1-(4-cyanobenzyl)imidazole-5-carboxaldehyde and NaBH3CN, yielding III after chromatog. In a test for inhibition of farnesylation of Ras-CVIM with human FPTase in vitro, almost all example compds. had IC50 of  $\leq$  50 µM.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:8509 CAPLUS Full-text

DOCUMENT NUMBER: 130:38399

TITLE: Preparation of spiro[furo[2,3-f]indole-7,4'-

piperidine] derivatives and analogs as 5-HT1B/1D

antagonists

INVENTOR(S): Halazy, Serge; Lamothe, Marie; Jorand, Lebrun

Catherine

PATENT ASSIGNEE(S): Pierre Fabre Medicament, Fr.

SOURCE: Fr. Demande, 39 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2761069	A1	19980925	FR 1997-3410	19970320
PRIORITY APPLN. INFO.:			FR 1997-3410	19970320
OTHER SOURCE(S):	MARPAT	130:38399		

GΙ

Title compds. [I; R2,R3 = H; R2R3 = CH2CH2 or CH:CH; Z = XZ2R; R = (un)substituted Ph, -naphthyl, -pyridinyl; XY = NCH2, NCH2CH2, C:CH, CR1CH2; R1 = H, halo, alkyl, alkoxy, etc.; Z1 = CO, SO2, (CH2)m+1, CO(CH2)m, (CH2)mCO, etc.; Z2 = bond, (CH2)n, CO, (CH2)nCO, etc.; m,n = 1-6] were prepared Thus, 1'-methyl-2,3,6,7-tetrahydrospiro[furo[2,3-f]indole-7,4'-piperidine] was N-acylated by 1-chlorocarbonyl-4-(2,3-dimethylphenyl)piperazine to give I (R2R3 = CH2CH2, Y = CH2, Z = NC6H3Me2-2,3, Z1 = CO). Data for biol. activity of I were given.

L5 ANSWER 54 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:798591 CAPLUS Full-text

DOCUMENT NUMBER: 128:13439

ORIGINAL REFERENCE NO.: 128:2625a,2628a

TITLE: Preparation of serine derivatives useful as tachykinin

antagonists

INVENTOR(S): Elliott, Jason Matthew; Macleod, Angus Murray;

Stevenson, Graeme Irvine

PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK SOURCE: Brit. UK Pat. Appl., 80 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
GB 2309458	A	19970730	GB 1997-1206		19970121
US 5885999	A	19990323	US 1997-786522		19970121
PRIORITY APPLN. INFO.:			GB 1996-1724	Α	19960129
OTHER SOURCE(S):	CASREA	CT 128:13439	; MARPAT 128:13439		
GI					

Title compds. I [m = 0-2; n = 0, 1; with the proviso that <math>m + n = 1 or 2; R1 = 0AB Ph, naphthyl, Ph2CH, PhCH2, where the naphthyl or any Ph moiety may be substituted; R2 = H, Ph, heteroaryl such as indazolyl, thienyl, furanyl, pyridyl, thiazolyl, tetrazolyl, quinolinyl, naphthyl, Ph2CH, PhCH2, wherein each heteroaryl, the naphthyl and any Ph moiety may be substituted; R3, R4 = independently H, C1-6 alkyl; R3R4 = C1-3 alkylene chain; Q = CR5R6, NR5; X = Y= H; XY = O; Z = bond, O, S, S(O), SO2, NR7 or CR7R8; R7, R8 = independentlyH, C1-6 alkyl] or pharmaceutically acceptable salts thereof are of particular use in the treatment or prevention of pain, inflammation, migraine, emesis and postherpetic neuralgia. Thus, coupling of (S)-2-tert-butoxycarbonylamino-3-(3,4- dichlorobenzyloxy) propionic acid with 4-(2-keto-1benzimidazolinyl)piperidine, followed by acidic deprotection and reductive benzylation with benzaldehyde and sodium borohydride gave serine derivative II as its HCl salt. The compds. prepared here are active with IC50 at the NK1 receptor of less than 1  $\mu M$ .

ACCESSION NUMBER: 1995:994586 CAPLUS Full-text

DOCUMENT NUMBER: 124:117093

ORIGINAL REFERENCE NO.: 124:21809a,21812a

TITLE: Preparation of N-[(3,4-dichlorophenyl)propyl]piperidin

e selective human NK3-receptor antagonists Bichon, Daniel; Van, Broeck Didier; Proietto,

INVENTOR(S): Vincenzo; Gueule, Patrick; Emonds-Alt, Xavier

PATENT ASSIGNEE(S): SANOFI, Fr.

Eur. Pat. Appl., 61 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	A1 B1			
			GB, GR, IE, IT, LI, LU,	MC NI DT CE
FR 2717477	A1	19950922	FR 1994-3193	19940318
FR 2717477	B1	19960607	IV 1994 2192	17740310
FR 2717478	A1	19950922	FR 1994-9478	19940729
FR 2717478	B1	19960621	11( 1991 91/0	19910729
FR 2719311	A1	19951103	FR 1995-571	19950119
FR 2719311	B1	19980626	110 1330 071	19900119
PL 185075	B1	20030228	PL 1995-307723	19950316
FI 9501265	A	19950919	FI 1995-1265	19950317
FI 116621	B1	20060113	11 1330 1200	13300017
NO 9501044	A	19950919	NO 1995-1044	19950317
AU 9514909	A	19950928	AU 1995-14909	19950317
AU 693845	В2	19980709		
ZA 9502228	A	19951221	ZA 1995-2228	19950317
ни 72065	A2	19960328	HU 1995-806	19950317
CN 1128756	А	19960814	CN 1995-103542	19950317
CN 1056605	В	20000920		
IL 113026	A	19990620	IL 1995-113026	19950317
RU 2143425	C1	19991227	RU 1995-103737	19950317
AT 204863	T	20010915	AT 1995-400590	19950317
PT 673928	T	20020228	PT 1995-400590	19950317
ES 2164746	Т3	20020301	ES 1995-400590	19950317
TW 380138	В	20000121	TW 1995-84102614	19950318
CA 2145000	A1	19950919	CA 1995-2145000	19950320
CA 2145000	С	20020507		
JP 08048669	A	19960220	JP 1995-61419	19950320
JP 2922816	B2	19990726		
US 5741910	A	19980421	US 1996-607976	19960229
US 5942523	A	19990824	US 1996-608718	19960229
NO 9705089	A	19950919	NO 1997-5089	19971104
нк 1005137	A1	20020315	HK 1998-104342	19980519
US 6124316	A	20000926	US 1999-306825	19990507
US 6294537	B1	20010925	US 1999-306821	19990507
IORITY APPLN. INFO.:			FR 1994-3193	A 19940318
				A 19940729
			FR 1995-571	A 19950119
				A3 19950317
		~= 404 445		B1 19970623

OTHER SOURCE(S): CASREACT 124:117093; MARPAT 124:117093

$$\begin{array}{c|c} A^1 & & \\ R^2 & & \\ N - (CH_2)_3 - C - CH_2NTAZ \\ & & \\ C_1 & & \\ & & \\ & & \\ \end{array}$$

AB The title compds. [I; A = direct bond, CH2, CH2CH2, CH:CH; A1 = (un)substituted 2-pyridyl or Ph; R1 = Me; R2 = HO, alkoxy, CN, (un)substituted NH2, etc.; R11 = H; such that R1R11 = (CH2)3] (e.g., II; m.p. 184°), useful as human NK3-receptor antagonists (no data) for the treatment of neurokinin B-induced diseases (no data), are prepared

ΙI

L5 ANSWER 56 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:916500 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 123:313779

ORIGINAL REFERENCE NO.: 123:56247a,56250a

TITLE: Preparation of geminal-disubstituted azacyclic

tachykinin antagonists

INVENTOR(S): Baker, Raymond; Lewis, Richard Thomas; Macleod, Angus

Murray; Stevenson, Graeme Irvine Merck Sharp and Dohme Ltd., UK

SOURCE: PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

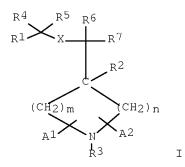
PATENT ASSIGNEE(S):

PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE	
WO	9519	 344			A1	_	 1995	0720	,	WO 1	 995-	 GB57			1	9950	112
	W:	AM,	ΑT,	ΑU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	ES,	FI,
		GB,	GE,	HU,	JP,	KE,	KG,	KP,	KR,	KΖ,	LK,	LR,	LT,	LU,	LV,	MD,	MG,
		MN,	MW,	MX,	NL,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SI,	SK,	ΤJ,	TT,
		UA,	US														
	RW:	ΚE,	MW,	SD,	SZ,	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT,	LU,
		MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	NE,	SN,
		TD,	ΤG														
CA	2180	746			A1		1995	0720	1	CA 1	995-	2180	746		1	9950	112
AU	9513	902			Α		1995	0801		AU 1	995-	1390.	2		1	9950	112
AU	6852	12			В2		1998	0115									

EP	73933	36			A1	19961	1030	EP	1995	-9052	0 4		1	9950	112
EP	73933	36			В1	19980	826								
	R:	AT,	BE,	CH,	DE,	DK, ES,	FR,	GB, G	R, IE	, IT,	LI,	LU,	NL,	PT,	SE
JP	0950	7500			T	19970	729	JP	1995	-5189	07		1	9950	112
AT	1701	74			T	19980	915	AT	1995	-9052	04		1	9950	112
ES	21201	170			Т3	19981	L016	ES	1995	-9052	04		1	9950	112
US	57600	018			Α	19980	0602	US	1996	-6761	52		1	9960	711
PRIORITY	APPI	LN.	INFO	.:				GB	1994	-542		i	A 1	9940	113
								GB	1994	-3072		i	A 1	99402	217
								WC	1995	-GB57		Ī	W 1	9950	112

OTHER SOURCE(S): MARPAT 123:313779

GΙ



The title compds. [I; A1, A2 = H, C1-4 alkyl; m = 2-4; n = 0-2; R1, R2 = (un)substituted Ph; R3 = H, COR9, CO2R10, COCONR10R11, COCO2R10, SO2R15, etc.; R4 = C1-6 alkyl substituted by a hydroxy group, (CH2)pNR10R11, CO2R16, CONR10R11, etc.; R5 = H, C1-6 alkyl; R6, R7 = H, C1-6 alkyl; R9 = alkyl, cycloalkyl, Ph; R10, R11 = H, alkyl; R15 = alkyl, CF3, (un)substituted Ph; R16 = alkyl; p = 1-4; X = 0, (un)substituted NH], useful as tachykinin antagonists (no data) for the treatment of pain (no data), inflammation (no data), migraine (no data), and emesis (no data), are prepared Thus, 4-phenyl-4-[[1-[3,5-(trifluoromethyl)phenyl]-2- hydroxyethoxy]methyl]piperidine hydrochloride (m.p. 198-202°) was prepared from 4-phenyl-4-carboxypiperidine tosylate in 5 steps.

L5 ANSWER 57 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1994:605217 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 121:205217

ORIGINAL REFERENCE NO.: 121:37365a,37368a

TITLE: 4-(aminomethyl/thiomethyl/sulfonylmethyl)-4-

phenylpiperidine tachykinin receptor antagonists

INVENTOR(S): Macleod, Angus Murray; Stevenson, Graeme Irvine

PATENT ASSIGNEE(S): Merck Sharp and Dohme Ltd., UK

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO	9413	639			A1	19940	0623	WO	1993-	GB253	35			19931	210
	W:	AU,	CA,	JP,	US										
	RW:	AT,	BE,	CH,	DE,	DK, ES,	FR,	GB, GI	R, IE,	ΙΤ,	LU,	MC,	NL	, PT,	SE
CA	2150	951			A1	19940	0623	CA	1993-	21509	951			19931	210
AU	9456	573			Α	19940	704	AU	1994-	56573	3			19931	210
AU	6828	38			В2	19971	1023								
EP	6733	67			A1	1995(	927	EP	1994-	9020	65			19931	210
	R:	AT,	BE,	CH,	DE,	DK, ES,	FR,	GB, GI	R, IE,	ΙΤ,	LI,	LU,	NL	, PT,	SE
JP	0850	4435			Τ	19960	)514	JP	1993-	5139	51			19931	210
US	5661	162			Α	1997(	0826	US	1995-	44862	22			19950	606
PRIORITY	APP	LN.	INFO	.:				GB	1992-	2601	4	Ž	Α :	19921	214
								GB	1993-	1372	6	Ž	Α :	19930	702
								GB	1993-	14486	6	Ž	Α :	19930	712
								WO	1993-	GB253	35	I	N :	19931	210

OTHER SOURCE(S): MARPAT 121:205217

GΙ

The title compds. [I; R1, R2 = (un)substituted C1-6 alkyl, alkenyl, alkynyl, halogen, CN, NO2, CF3, etc.; R3 = H, (un)substituted alkylcarbonyl, (un)substituted CO2H, (un)substituted CONH2, etc.; R5-R8 = H, C1-6 alkyl; X = NR4, SO, SO2; R4 = H, alkyl, CHO, Bz, alkylcarbonyl; m = 2-4; n = 0-2 when m = 2-3 and n = 0-1 when m = 4], useful as tachykinin receptor antagonists (no data), are prepared Thus, 4-(2- methoxybenzylaminomethyl)-4-phenylpiperidine dihydrochloride, m.p. 78-80°, was prepared from 4-cyano-4-phenylpiperidine hydrochloride in 4 steps.

L5 ANSWER 58 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1990:611853 CAPLUS Full-text

DOCUMENT NUMBER: 113:211853

ORIGINAL REFERENCE NO.: 113:35795a,35798a

TITLE: Preparation of 1-(2-hydroxyalkyl)piperidines and

analogs as antitumor agents

INVENTOR(S): Caravatti, Giorgio; Stanek, Jaroslav; Frei, Joerg

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 374095	A2	19900620	EP 1989-810919	19891205
EP 374095	A3	19911030		

R: AT, BE, CH	, DE, ES	, FR, GB, G	R, IT, LI, LU, NL, SE		
ZA 8909436	A	19900829	ZA 1989-9436		19891201
CA 2004986	A1	19900612	CA 1989-2004986		19891208
AU 8946076	A	19900614	AU 1989-46076		19891208
DK 8906236	A	19900613	DK 1989-6236		19891211
JP 02212471	A	19900823	JP 1989-319055		19891211
HU 53078	A2	19900928	HU 1989-6499		19891211
DD 290186	A5	19910523	DD 1989-335505		19891211
PRIORITY APPLN. INFO.:			CH 1988-4574	Α	19881212
OTHER SOURCE(S):	MARPAT	113:211853			
GT					



AB The title compds. [I; R1 = C1-30 alkyl; R2 = C02H, alkoxycarbonyl, CONH2, (un)substituted alkyl, etc.; R3 + H, alkyl, aryl; X, Y = H, OH, alkoxy, acyloxy] were prepared as antitumor agents (no data). Thus, 4-cyano-4-phenylpiperidine was refluxed 6 h with 1,2-epoxydecane in EtOH containing K2CO3 to give the title compound II (R = 1-octyl). A capsulr formulation comprising I is given.

L5 ANSWER 59 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1981:569708 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 95:169708

ORIGINAL REFERENCE NO.: 95:28393a,28396a
TITLE: Lincomycin compounds
INVENTOR(S): Birkenmeyer, Robert D.

PATENT ASSIGNEE(S): Upjohn Co., USA

SOURCE: U.S., 24 pp. Cont.-in-part of U.S. Ser. No. 96,652,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4278789	 A	19810714	US 1980-148056	19800519
US 4309533	A	19820105	US 1980-194632	19801006
US 4310660	A	19820112	US 1980-194634	19801006
IL 61245	A	19860731	IL 1980-61245	19801010
AU 8063443	A	19810528	AU 1980-63443	19801016
AU 535986	B2	19840412		
CA 1165315	A1	19840410	CA 1980-362485	19801016
GB 2063252	A	19810603	GB 1980-33726	19801020
GB 2063252	В	19830518		
ZA 8006438	A	19811028	ZA 1980-6438	19801020
NL 8006229	A	19810616	NL 1980-6229	19801114
NL 194240	В	20010601		
NL 194240	С	20011002		
DE 3043502	A1	19810604	DE 1980-3043502	19801118
DE 3043502	C2	19890511		

ES 496988	A1	19820501		1980-496988		19801119
JP 56087597	A	19810716	JP	1980-162723		19801120
JP 63038037	В	19880728				
BE 886301	A1	19810521	ΒE	1980-202901		19801121
SE 8008181	A	19810524	SE	1980-8181		19801121
SE 447260	В	19861103				
SE 447260	С	19870212				
FR 2470134	A1	19810529	FR	1980-24823		19801121
FR 2470134	B1	19850726				
HU 26810	A2	19830928	HU	1980-2786		19801121
HU 187281	В	19851228				
HU 30045	A2	19840228	HU	1983-317		19801121
HU 190437	В	19860929				
CH 647244	A5	19850115	СН	1980-8629		19801121
PL 132002	B1	19850131	PL	1980-233258		19801124
FR 2487358	A1	19820129	FR	1981-13537		19810709
FR 2491072	A1	19820402	FR	1981-13542		19810709
FR 2493852	A1	19820514	FR	1981-13543		19810709
FR 2493852	B1	19850816				
SU 1169543	A3	19850723	SU	1981-3444858		19810819
ES 507346	A1	19820816	ES	1981-507346		19811120
ES 507347	A1	19820816	ES	1981-507347		19811120
ES 507345	A1	19820901	ES	1981-507345		19811120
CA 1164863	A2	19840403	CA	1982-414643		19821101
CA 1164864	A2	19840403	CA	1982-414644		19821101
CA 1165316	A2	19840410	CA	1982-414645		19821101
JP 63225392	A	19880920	JP	1988-26734		19880209
JP 01041157	В	19890904				
PRIORITY APPLN. INFO.:			US	1979-96652		19791123
			US	1980-148056	А3	19800519
			CA	1980-362485	А3	19801016
OMITED COLLDON (C)	14200000	05 160700				

OTHER SOURCE(S): MARPAT 95:169708 GI

AB Lincomycin analogs I (R = amino function from Me 1-thiolincosaminide derivs.; R1n = H, (un)substituted C1-8 alkyl, (un)substituted C3-8 cycloalkyl, halo, Ph, substituted Ph, substituted O, substituted N hydroxyalkyl, aminoalkyl), with activities against bacteria, coccidia, and mycoplasma, were prepared

Thus, 4-ethyl-2-pyridinecarboxylic acid-HCl was treated with Et3N and iso-Bu chloroformate and then with Me  $7(S)-7-\text{deoxy}-7-\text{chloro}-1-\text{thio}-\alpha-\text{lincosaminide}$  to give II, which was hydrogenated over PtO2 in MeOH-HCl to give III. Antimicrobial spectra of III are given in comparison with those of clindamycin.

ANSWER 60 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1969:57609 CAPLUS <u>Full-text</u>
DOCUMENT NUMBER: 70.57609

DOCUMENT NUMBER: 70:57609

ORIGINAL REFERENCE NO.: 70:10809a,10812a TITLE: New antibiotics

INVENTOR(S): Maggi, Nicola; Sensi, Piero PATENT ASSIGNEE(S): Lepetit S. p. A.; CIBA Ltd.

SOURCE: S. African, 17 pp.

CODEN: SFXXAB

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION: DATENT NO

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
ZA 6706475	 А	19681229	ZA 1967-6475		19671115
GB 1159267	А	19690723	GB 1966-49389		19661103
IL 28777	A	19711229	IL 1967-28777		19671016
NL 6714242	A	19680506	NL 1967-14242		19671019
DK 114697	В	19690728	DK 1967-5280		19671023
FI 45978	В	19720731	FI 1967-2856		19671024
CH 483444	A	19691231	CH 1967-15186		19671030
CH 491954	A	19700615	CH 1969-12547		19671030
CH 496730	A	19700930	СН 1970-6917		19671030
US 4188321	A	19800212	US 1967-679195		19671030
NO 117855	В	19691006	NO 1967-170360		19671101
SE 330173	В	19701109	SE 1967-15059		19671102
BE 706022	A	19680318	BE 1967-706022		19671103
ES 346731	A1	19690101	ES 1967-346731		19671103
FR 1601071	A	19700810	FR 1967-126965		19671103
CS 150943	B2	19730917	CS 1967-7802		19671103
JP 50024960	В	19750820	JP 1967-70908		19671104
FR 7156	M	19690804	FR 1968-138464		19680202
FI 47666	В	19731031	FI 1972-782		19720322
FI 48473	В	19740701	FI 1973-2093		19730629
PRIORITY APPLN. INFO.:			GB 1966-49389	А	19661103
OTHER SOURCE(S):	MARPAT	70:57609			

OTHER SOURCE(S): MARPAT 70:57609

Rifamycins B, O, S, SV, and their 25-deacetyl derivs. are prepared by alkaline hydrolysis in a solvent and (optionally) convertion of the derivs. of rifamycin S and SV into each other by using ascorbic acid or K3Fe(CN)6 or hydrogenation of the aliphatic chain of the rifamycin mol. to the corresponding hexahydro derivative E.g., to prepare 25-deacetyl-3diethylaminomethylrifamycin SV, to a solution of 7.8 g. diethylaminomethylrifamycin SV dissolved in 160 ml. ethanol, was added an aqueous 5% NaHCO3 solution, 50 ml. of the mixture was refluxed 8 hrs., cooled, and concentrated in vacuo; 70 ml. water was added and the mixture extracted with 200 ml. AcoEt after adjusting the pH to 4-4.5. The organic layer was dried and concentrated in vacuo to yield the deacetyl derivative, which was filtered off and purified by chromatog. on silica gel with Me2CO-CHCl3 (1:3) as eluent to yield 5 g. product decomposing 152-8°. Similarly prepared were 25-deacetyl-4-guanylazo-4-deoxyrifamycin SV, decomposing 228° and 25deacetylrifamycin S (I), decomposing  $144-7^{\circ}$ . I is completely hydrogenated in

EtOH with PtO2 catalyst by taking up 4 moles H. The mixture is filtered, the filtrate evaporated, the residue dissolved in NaHCO3 solution, the solution oxidized with K3FeCN6 and the product extracted with CHCl3 to give 25-deacetylhexahydrorifamycin S, m.  $122-30^{\circ}$  and SV, no m.p. given. Also prepared were (m.p. given): 25-deacetyl-3-methylaminorifamycin S, 208°, and SV, -; 25-deacetyl-3-morpholinorifamycin SV, 240°, and S 175-8°; 25-deacetyl-3-dimethylhydrazonomethylrifamycin SV, 179-81°, and 25-deacetyl-3-piperidinorifamycin SV, 242-5°.

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STN INTERNATIONAL LOGOFF AT 07:58:44 ON 10 JUL 2008